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Contents

Articles

URBAN LAND POLICY

Rakesh Mohan

1

ARCHITECTURE, COMMUNITY PLANNING AND THE URBAN SYSTEMS

Aditya Prakash

12

AHMEDABAD URBAN ECONOMY AND ITS PLANNING PERSPECTIVES

E. Narayanan Nair

28

ATTITUDES OF URBAN WORKERS TOWARDS VISITORS FROM HOME PLACE : THE CASE OF CALABAR, NIGERIA

Edet M. Abasiokong

33

CALCUTTA CORPORATION'S PROPERTY TAXATION : A STORY OF LOSS OF POTENTIAL DEMAND

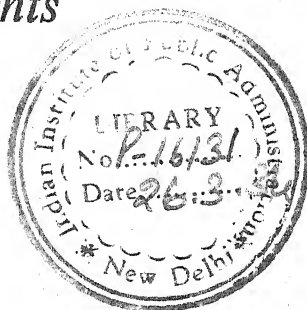
Mrinal Kanti Bhattacharya

45

ABOLITION OF MOTOR VEHICLES TAX : CASE STUDY OF HYDERABAD MUNICIPAL CORPORATION

P. Arjun Rao

54



ORGANISATIONAL STRUCTURE OF A WATER AUTHORITY: THE
MADRAS METROPOLITAN WATER SUPPLY AND SEWERAGE
BOARD

65

H.B.N. Shetty

WATER PRICING : WITH REFERENCE TO THE CALCUTTA METRO-
POLITAN DISTRICT

78

P.K. Chatterjee and A.K. Dutta

Book Review

INDIAN ECONOMY : THE REGIONAL DIMENSION (AMITABH
KUNDU AND MOONIS RAZA)

84

Rakesh Mohan

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*Urban Land Policy: Some New Approaches**

RAKESH MOHAN

THE TRANSITION of land use from agricultural to non-agricultural activities is central to the urbanisation process along with the concentration of population. When the process of urbanisation was slow, the transition in land use was equally slow and public management of land was neither necessary nor desirable. With cities growing at 3-4 per cent a year in population (some, like Bangalore at 5-6 per cent) public participation in the land market becomes inevitable as well as desirable. The question then becomes what the objectives of urban land policy are and, consequently, which types of participation are useful and which are not. Since urban land policy affects all facets of urban activity it is a very complex subject with few clear and unambiguous guidelines. Hence, it is useful at the outset to clarify some notions relating to the role of the price of land in the allocation and distribution of urban activities.

GENERAL PRINCIPLES FOR URBAN LAND POLICY

While it is a commonplace to hear that the price of land has risen in an 'unwarranted' manner in urban areas it is not entirely obvious what such a statement means. The observed price of any commodity is essentially a distribution around some mean and it is, in general not too difficult to find this mean. If the market does not contain significant distortions, the variance in observed prices is small. The key idea is that most goods are homogeneous and it, therefore, makes sense to talk about their price. Urban land, however, has the troublesome characteristics that it possesses a value not so much because of its intrinsic characteristics but because a particular plot is in a particular location. Hence, each plot of urban land is somewhat distinct and the

*The views expressed in this paper are those of the author and should not be attributed to the Planning Commission to which he is attached.

value of plots in different locations can vary by large amounts. Conceptually, we can think of the price of land as being affected by three sets of characteristics:

- (i) site-specific characteristics (intrinsic quality of land),
- (ii) neighbourhood qualities (amenities), and
- (iii) access characteristics.

The influence of (i) is relatively minor as compared with that of (ii) and (iii). The main determinant of urban land values is the attractiveness of location—or the intensity of access characteristics. Thus, typically, land in the central city which has close access to centres of employment and commerce has very high value and that at the periphery, relatively low value. In order to understand the dynamics of urban land value increases in the context of urban growth, it is useful to consider the simplest example of a monocentric city. Even though we know that cities are not strictly monocentric, many net characteristics are such that we can treat them 'as if' they were. Reality is then not distorted too much if we regard the distance from the city centre as the key determinant of land price: distance being a proxy for the access characteristics of a particular plot of land.

It is now well known that land values decline with distance from the city centre. At the edge of the city, land values approach the existing value of land in alternative uses. The important point to note is that land values increase everywhere, but the *proportional* increase at the periphery is likely to be phenomenal. It is often these increases that are observed and regarded as unwarranted when it should be understood that such increases in value are intrinsic to the process of urban growth.

The problem of interpretation, however, remains. Once a pattern of land price surface changes, how does one decide whether these changes are warranted or unwarranted. If land values increase in real terms everywhere in the city, is there something necessarily wrong? If land value measures some kind of accessibility value then the increase in size of a city in population can be said to increase the accessibility (or opportunity set) for everyone in the city. Hence the increase in value of land is really measuring the increase in its 'productivity' and is, in that sense, justified. But when does speculation exist?

SPECULATION

Speculation can exist both when there is a competitive market as well as in a monopoly situation. *Speculation can be defined as the buying and selling of land by an agent purchasing for purposes of capital*

gain and not for development. Where it is desirable or undesirable really depends on the character of prevailing expectations. *In even a competitive situation, expectations of price increases can feed on themselves and lead to an unwarranted price rise.* In such a situation, eventually, the prices will have to come down but, (a) eventually might be a long time, and (b) meanwhile, there is a misallocation of resources according to these erroneous price signals. Furthermore, there is a redistribution of income to speculators. Thus we need to worry about speculation in even a competitive situation.

In a *monopoly* situation, the owner of land can affect the price of land by holding it off the market in order to raise prices. His power to do this depends on: (a) his concentration of ownership (what proportion of land is subject to concentration of ownership), (b) the elasticity of demand for land, and (c) the conditions in other cities. Even if there is a relatively low degree of concentration of ownership of land on a city-wide basis (the typical case), there can be extreme concentration of ownership in particular parts of the city. In the latter case, a large land owner can have a major effect on land values in that part of the city—recalling that each plot of land is unique. A landowner cannot hold the land off the market indefinitely because in order to realise his gain he has to sell it some time. If he holds it off too long, competitive parcels of land could be developed and he might lose his accessibility value. In the monopoly case, therefore, the owner is essentially competing against himself. Although the land may eventually come on the market, we need to be concerned because of misallocation of resources in the meantime and a possible sub-optimal configuration of the city resulting from it. The durability of structures contributes to this problem.

With the promulgation of the Urban Land Ceiling law the ironic situation that exists now is that the main monopolists left in the urban land market are public authorities. Since the use of excess urban land holdings has been frozen, it is the public authorities which hold the key to their release into the market. In addition, the advent of Housing Boards and Urban Development Authorities which hold large tracts of land and release them in dribs and drabs has also probably led to an increase in speculative transactions: the speculators here, perhaps unwittingly, being these public authorities. It is partly the inability—both financial as well as physical—of these public authorities to develop land rapidly enough commensurate with the rising demands of an expanding population that effectively restricts the supply of developed urban land and turns the public authorities into the role of monopolist speculators. In the new situation where it is public authorities which either hold large tracts of land or hold the decision making powers concerning the release of frozen land, it is important that methods be

found such that the supply of developed land is accelerated. Some suggestions in this regard are given below.

INSTRUMENTS OF LAND POLICY

The basic problem of urban land policy is the supply of serviced land: (i) in adequate quantity; (ii) at the right locations; (iii) at the right time; and (iv) at the right price.

These four considerations are obviously interrelated. It is difficult to predict where new developments will take place and when—and the price of land is highly determined by its location. The price is very important for it determines the intensity of housing development that then takes place. Much concern is expressed to restrain the price rise of urban land in order to make it accessible for lower income groups. It should be understood, however, that if the price of land is pegged too low, extensive rather than intensive development takes place and hence the demand for land gets intensified. If, by public participation, these prices are kept low and not allowed to rise in response to higher demand, the only logical consequence is that the public authority is forced to provide larger and larger quantities of land with all the attendant costs. Urban land policy should, therefore, be aimed at inducing the 'right' prices to prevail in the market so that they can act as appropriate signals in the development of the land. Public authorities need to use both indirect as well as direct methods of intervening in the market. Indirect methods should essentially aim at curbing speculation as well as encouraging the private supply of developed land, while direct methods should be mainly concerned with making available increased volumes of developed land.

INDIRECT METHODS

Property Tax

A well administered property tax can do much to regulate the land market. If properties are valued frequently, undesirable speculation will be dampened considerably since taxes would have to be paid on unrealised gains. There is little reason why vacant lots should be taxed at lower or higher rates as long as they are revalued frequently. The holders of vacant lots should be given signals—through rising assessments with rising values—indicating the opportunity costs of their holding the vacant land. There is a genuine administrative problem of frequent land valuation but this can be systematised as suggested below. If a property tax is administered well it has the beneficial effects of curbing speculation, of inducing the private supply of vacant land at the right time and raising revenue for the public authority at the same time. A

well administered property tax has the virtue of being simple, consistent and predictable. Any reduction in uncertainty curbs undesirable speculation.

Capital Gains Tax

If a property tax is administered well there is really no need for a special capital gains tax. In a situation where there is an expectation spiral, however, the imposition of a new capital gains tax or the increase in an existing one can serve to burst the expectational bubble. In a competitive situation such a policy will almost certainly decrease land value as a one short measure but the rate of growth will increase subsequently. This is, therefore, an effective measure where speculation is feeding on itself and the market is competitive. The effect in a monopoly situation is, however, indeterminate. The reason for this is that for a monopolist, land sold today affects the volume of land available for sale tomorrow and he can, therefore, vary either price or quantity to maximise his own present value. The imposition of a capital gains tax in a monopoly situation is, therefore, not certain to reduce prices: they might well increase! In many cases where a capital gains tax is enacted owner-occupied housing is exempted. Such an exemption leads to an increase in the demand for owner-occupied housing and, therefore, for land and an increase in housing and land prices is likely to result. Thus the imposition of a new capital gains tax needs to be made with care.

Approval Process

In general, an increase in uncertainty fuels undesirable speculation and land prices increase consequently. Thus a tightening up of the approval process for land development can reduce uncertainty and speculation. A reduction in time required for such approvals, clarity of rules and regulations and predictability of approval would all have the effect of reducing uncertainty. In the current circumstances, this applies particularly to all the lands frozen under the Urban Land Ceiling Act.

Land Price Publication System

There is currently serious concern being expressed at the perceived very high increases in urban land values, particularly in the major metropolitan areas. There are no systematic data to actually show that land values have been increasing at 'undesirable' rates in recent years; nor, if the perception is correct, is there a good understanding of the reasons behind the rise. Is it because of a major constriction in supply resulting from the Urban Land Ceiling Act, or has there been an upsurge in speculative activity in response to the general inflationary conditions prevailing in the country in the last few years? In any case it is important that systematic data be collected so that the facts are

clear. In addition, good data on land values would help in the collection of property taxes, capital gains taxes as well as the wealth tax.

A similar situation existed in Japan in the post-war years where the average index of urban land prices rose by as much as 27 fold in 20 years between 1955 and 1974. Although a major part of this increase was clearly due to the sharply rising demand for housing accompanying massive increases in income as well as the rate of urbanisation during these years, it was felt that at least part of the increase was due to undesirable speculative activities. In order to counter these tendencies a 'Land Price Publication' system was put into effect in 1969. "The system is intended to provide a reliable pricing guide to those proceeding to land transactions by regularly publishing adequate land prices for the purposes of formulating rational land prices." The system was first proposed in 1963 with a recommendation that professional real estate appraisers be trained and licensed by the government. Once a corps of these trained appraisers exists the valuation of land in transactions can be done systematically and speculative valuations curbed. The appraisal work requires highly specialised knowledge, an abundance of experience, accurate judgement and proper communication, and it is only by specialists equipped with these abilities that the work can be done. The government, therefore, designed a nationwide examination for real estate appraisers: appraisers could be licensed only after passing this examination.

The land price publication system, by which representative land tracts in and around larger urban areas are chosen, makes public the prices considered adequate for such land tracts so that they may serve as standards for land pricing in real estate transactions and also provide the basis for the calculation of adequate sums of compensation for securing land tracts to be used for undertakings of a public nature. Thus the system serves the purpose of contributing to the land price regulation at adequate levels.

The system was put into effect in Japan in stages. Starting in 1970 when it covered only the three major urban regions and prices were published for about a 1000 representative land tracts, it now covers all urban areas in the country covering almost 20 per cent of the total area of the country and prices are published for about 15,000 representative land tracts. "A representative land tract is defined as a unit of land where utilisation and environmental conditions are considered normal and which is found in an area where natural and social conditions make it evenly usable for common or similar purposes." In such an intensive area, a unit of land is chosen as representative and its price observed and published.

The published land prices are those considered adequate per unit

area in the representative land tracts as of 1st of January of each year. By an adequate price is meant the price which would have been quoted and accepted in free land sale transactions. The adequate price is determined by the Land Approval Committee on the basis of appraisals done at its request by at least two licensed real estate appraisers. The prices of these representative land tracts are published every year through official gazette giving address of each land tract, its land use and other details of availability of services in and around the plot. The National Land Appraisal Committee sends to the heads of towns, villages, etc., detailed documents concerning the representative land tracts. The average density of the representative land tracts is about 1 per km² for residential areas and about 3 per km² for commercial areas. The density is somewhat lower for industrial and quasi-industrial districts.

Once the land prices are published every year, the price in every land transaction has to be certified by a licensed appraiser who has to take into account the published price of a similar plot of land in determining the price of the plot in question. Public authorities also have to respect the published land prices.

The establishment of the land price publication system has had the effect of stabilising land value increases and in helping the general public with increased information on prevailing prices.

The conditions in the major metropolitan areas in India are now such that a similar scheme should be put into effect. There is no doubt that it would not be an easy scheme to implement, but the benefits of such a system would seem to be large enough to warrant a beginning in at least the largest cities. Each of the major cities could be divided into a sufficiently disaggregated grid and a survey undertaken every year to determine the prevailing land prices. There will undoubtedly be problems of assessment related to black money, the existence of different forms of tenure, etc., but appropriate training and care in the setting up of the system can go a long way in resolving these problems as well. Decisions would need to be taken on whether the land price system would be administered by a national, state-level or local-level agency. It would probably be advisable to establish a state-level agency which then communicates the prices to each city. Once the system is established, it would also help in the assessment of property taxes.

DIRECT METHODS

The current pattern is for public authorities to notify large pieces of land on the periphery of the city at a certain time, often in the context of the framing of a Master Plan. The notified price is usually the prevailing agricultural price. Land so notified is often acquired many years

later and developed even later. Owing to financial constraints, public authorities are often unable to develop the land fast enough and, because of the public monopoly situation, the private sector is not able to develop the land either. The result is overall shortage of land accompanied by an unwarranted rise in prices. Large scale squatting can also result because of public ownership and shortages of serviced land. One other consequence is that it is often that poor farmers are the net losers in this transaction when large tracts of land on the periphery of a city are notified, while the largely better off urban settlers get the benefit of obtaining land at effectively subsidised prices. The relatively low rates of compensation also give rise to legal objections from the owners and as a result land acquisition can be held up for long lengths of time—again causing shortages of serviced land in the mean time. It has also been reported that public authorities, like Housing Boards, are running into increasing difficulties in land acquisition procedures. Hence it is imperative that innovative schemes be tried which have the effect of speeding-up land development in an organised manner and at low costs to the public exchequer. Some examples are given below.

Land Readjustment

This scheme has been used on a large scale in South Korea and Japan where urbanisation took place at an unprecedentedly rapid rate along with their higher rates of industrialisation. In brief, land readjustment is a process in which a public authority assembles numerous small parcels of raw land without initially paying monetary compensation to the owners. It then develops it and subdivides it for urban use. It calculates the total cost of development and retains part of the acquired land for two purposes. First, a portion of the land is required for public uses, such as, streets, drains, parks, etc., say 30 per cent of the land. Second, a portion of the land is kept, say 20 per cent, which can be sold by the public authority in order to recover all the development costs incurred by it on the project. The rest, say 50 per cent, is returned to the original owners in proportion to their original contributions. Land readjustment is, therefore, a temporary form of public partnership to achieve ordered urban development over large areas and to find means of financing it. Such a scheme has many advantages. Firstly, the original owners are able to live in the area where they have traditionally been living and their dislocation is not as severe as it otherwise might be. Secondly, while 50 per cent of their land might be acquired without compensation, the gains they make from the remaining land more than offset their losses. Third, large amounts of land can be developed without initial finance problems except in the first project that is taken up. Fourth, unlike the case of land acquisition large amounts of scarce public capital do not get locked up in unutilised land. Fifth, because the origi-

nal owners get adequate compensation there are fewer legal disputes and hence land development gets speeded up. Over the disadvantage side, it is clear that the land readjustment process involves complex administrative procedures requiring a certain amount of public cooperation. Further, if land re-adjustment is not done on a large enough scale, price rise in the adjusted areas would be very high. However, it has been proved in Japan and Korea, under conditions of extremely rapid urbanisation, that it is a practicable procedure.

Announced Standard Price System

This is an alternative to the current system of land notification where the price of the land to be acquired is fixed much in advance, and a corollary to the Land Price Publication System suggested earlier. It would be more desirable if a 'standard' price is announced for each area in a base year. Subsequent to that, inflation adjustments can be announced every year along with other 'real' price rise that are observed to occur around the notified areas. Land is then acquired only when it is needed and at the prevailing announced standard price. Such a system has a number of advantages. First, again the original landowners are not exploited in favour of the better off subsequent urban dwellers—as has happened in New Bombay, for instance. Second, the public authority has to face real prices in its land acquisition activities: this would induce appropriate levels of development of the land when it is acquired and developed. The public authority also has incentives (as well as pressures) to develop land early in the face of ever increasing acquisition costs. Third, unlike the usual case where land at the urban periphery is subject to intense speculation, land prices would be controlled under some regular system of increases. This is, therefore, a system intermediate to advance notification and no control with probable beneficial effects for further land development.

Financial Land Banking

As distinguished from a local public authority acquiring large pieces of land in the city's vicinity a state level (or national) land banking authority can be formed which indulges in physical as well as financial activities. Each state, for example, could appoint such an authority to administer the lands acquired under the Urban Land Ceiling Act. A financial land bank may be endowed with initial equity, in this case in the form of lands acquired under the Ceiling Act and then allowed to float debentures in order to finance land development operations. Such a Bank can indulge in a number of activities. It can buy developed as well as undeveloped sites. It can give priority to socially desirable housing projects in its resales. The profits made from such an activity can be

ploughed back into further land development activities. It can issue 'land based' debentures. An investor can buy a debenture linked to a specific piece of land. The land bank develops it and the investor can either just cash his debenture in the form of the piece of land indicated or take cash plus a portion of the land value increments that occur later. Thus, the land bank is able to obtain finance for development of land and investors can either obtain a safe return on their investment or actually obtain serviced land for housing or other purposes. This might also help in curbing undesirable speculation in times of inflation since the public would be provided alternative financial instruments in the form of these land based debentures which would be adequate hedges against inflation. The land bank can also issue mortgage guarantees in respect of mortgages held by other financial institutions and the guarantees can themselves be used as collateral for further loans. This would help in improving the availability of capital for housing purposes. The land bank can also offer other specialised land services such as appraisal, loans for land and even management of public properties. The idea is basically to use land as a financial resource in order to aid the development of land for housing purposes and without major claim on the public exchequer. Further, similar to HUDCO, such an apex institution can develop expertise in the area for technical assistance purposes.

SUMMARY

The key idea in all the above schemes for direct as well as indirect participation in the land market is that public authorities should take steps to accelerate development of land for housing and other purposes by financing them with a *portion* of the expected increments in land value. It is unrealistic to expect to capture *all* of the increments as is often attempted. Public cooperation can essentially be 'bought' by allowing land owners a substantial portion of unearned increments occurring as a result of urbanisation. Some beneficiaries would be the poor farmers who happen to own lands at the periphery of a city, while others might be relatively well off land owners. To the extent that an efficient land price publication system can be put into effect, the income distribution consequences would be controlled by capital gains taxes, etc.

Much of the thrust of this paper has been to use land as a resource in the production of housing and other amenities, but that this can only be done with a good understanding of the workings of the land market. Under current condition of urban growth there must be active participation of public authorities in the development of land for housing purposes: for all income groups, rich, middle-income and poor, but in different ways for each group. There must be no subsidy for the rich—hidden

or otherwise—as often results from public participation in the land market. The poor must not be thwarted in their own attempts to avail of what meagre shelter they can. The private sector has to be given incentives to invest in this area in some of the ways that have been suggested. This is especially important since public sector resources for this sector are likely to continue to be restricted in the foreseeable future. □

*Architecture, Community Planning and the Urban Systems**

ADITYA PRAKASH

A CITY APPEARS to represent the aspirations of man. All that is grand, magnificent, new, progressive, high sounding, bewildering, exciting, exhilarating... is projected in the city. The bigger the city, the greater the number of attributes, and expectations. The cities are becoming bigger and bigger, and, therefore, more and more complicated and exciting. But are they simultaneously meeting the objectives of efficiency and equity? Perhaps they are becoming dangerously more inefficient and inequitable.

I need not deliberate on the truth or justification of this statement for it is obvious, but I must examine:

1. How has it happened?
2. How far is the profession of 'Architecture' responsible for it?
3. What must we, particularly architects, do about it?

Before the above mentioned three points are examined, it is necessary to enunciate what I consider is the real nature of a city. I do so because I believe that the inefficiency and inequity of the urban centres, particularly big urban centres, is the direct outcome of this nature. Unless we consciously strive to change this nature, there is no firm basis to create viable management system for cities—such as will endure for any length of time. Most solutions at present practised are temporary or escapist. The rapidity with which they become obsolete is such that in many cases they are out of date before implementation.

Although we give various names like metropolis city, town, village hamlet to the places where people live, work, and take care of their bodies and souls, a little reflection will reveal that they are all places of human settlement—big, medium, and small. The life in smaller places,

*Presented at the Indo-US Sub-Commission Seminar on Architecture and Community Planning at Ahmedabad, November 23-27, 1981,

namely, 'villages' sustains essentially on the produce of the land, and in the bigger places namely 'cities', it sustains on 'exploitation of the produce of the villages surrounding them. The bigger the city, the greater the exploitation. A city essentially breeds a parasitic society. A city is conceived in power, in the expression of that power, and in the maintenance or enhancement of power. It has always been so—only the nature of power has changed from place to place and from time to time. Sometimes the power is vested in the clergy, sometimes in the king, or in the feudal lord, sometimes in the merchant and sometimes in the bureaucracy. With the structure of power the nature of the city has changed. But the essential purpose of a city always has been parasitic and exploitative. The village has always been regarded as a place of production and hence exploitation. It is quite true that a city is a place of exchange of skills and commodities, centre of education and culture, and provider of opportunities for industry and enterprise. But we should not overlook the fact that all these activities and skills have their origin or base in power and exploitation and not in equity and efficiency—(efficiency for the benefit of general public). One can be very efficient in so manipulating the trade or so managing an industry as to monopolise most of the market. But such efficiency is not for the general good. It is with this background that I wish to examine the three questions I have raised.

How have the cities become inefficient and generator of inequity?

As I said, the cities were conceived in 'power'. Most of the cities like Delhi (Shahjahanabad, New Delhi). Ahmedabad, Aurangabad were founded by rulers—irrespective of how they came to be rulers, or whether they were good rulers or bad rulers. They fancied a city for themselves to live in style and to preserve that style of life. Other decisions in the founding of the city followed from that basic tenet. Some cities like Bombay, Madras, Calcutta grew on trade routes and some like Banares, Haridwar, Madurai had their base in religion. Whatever the basis, until the advent of the industrial revolution about a century ago, the cities never grew so much as to be a menace to the surrounding countryside. Indeed one took the voraciousness of the rulers with good humour if he had the reputation for generosity; otherwise suffered it with stoicism if he was cruel and rapacious, because whatever the ruler did, the large countryside still remained free from his influence. The reach was determined by the muscle power of horses or men. The cities could not expand more than the easy reach of the transport systems that prevailed.

But the induction of steam engine—the never tiring horse and one who could be fed while it moved—stretched the hand of the ruler, and the trader a hundred-fold. The ruler could despatch his forces with

speed to put down an uprising in far flung parts of his empire, the trader could pick merchandise from one place and sell it at a distant place at much higher price. Although it is said that one activity was to maintain law and order, and other to supply the genuine needs of the people for goods from other places, the real motive force behind both activities was in one case consolidating, expanding and maintaining a power structure and in the other, monopolising trade irrespective of the needs and aspirations of the society. Yet the railway line and the steam engine did not do much harm to the fabric of the city, because whereas the cities were connected with each other by fast means of transport, the movement within the city still was governed by the muscle power of men and animals; and that controlled the growth. The city still remained comprehensible.

It is really the advent of the internal combustion engine which brought havoc to the fabric of the city, and continues to do so till today. The motor-vehicle, which started as a pleasure tool of the rich did two things. Firstly, it worked its way into the interstices of the city throwing it out of gear with its fumes, noise and capacity to kill. Secondly, it attacked the surrounding countryside by the ease with which it could get there and return. This second facet opened a new vista for its users. Why not live up in the country and come down to the city for work? Too many people thought this a good solution for living and working. Ultimately living and working became two separate entities of people's lives. They were not so before.

Simultaneously with the steam engine and the internal combustion engine came the mechanised industry. There was industry before the industrial era, but its source of power was the human or animal muscle. Thus its capacity of exploitation of other persons' labour was much less. Hence it was small scale industry, therefore, non-polluting, non-congesting, not unhealthy and not liable to concentrating power in a few hands. The mechanised industry made it possible for a large number of tools to be controlled by the same man.

It must be understood that this was not the essential requirement of the industrial process. It would be clear if one visits any factory. A factory is a conglomeration of a large number of similar tools or machines doing the same work. These machines or tools could have been at different places also under different ownerships, with muscle power it was not possible to bring them at one place. But with mechanical power it became possible, not obligatory, to bring them at one place. What was possible was done by those in power to consolidate their position. This led to the creation of the working class and the employers. Since this type of mechanised industry needed a large number of workers living near the industry, the congestion of the cities followed.

Once this logic of mechanisation or industrialisation became ingrained in the minds of the people—rulers and ruled—indiscriminate expansion of the cities followed. Job opportunities in the villages reduced, and industrialisation became the accepted method of providing jobs. So the state also adopted a policy of industrialisation as a method of development and creation of job opportunities without realising that the method was self defeating, indiscriminate production without corresponding consumption leads to a blind alley. Hence the search for foreign markets, and conquests, and exploitation. Cottage industry or small scale industry which persons like Mahatma Gandhi advocated, for they saw the inherent dangers of mass industrialisation, became the laughing stock for the intelligentsia and were dubbed as retrogressive.

There is another aspect of industrialisation which is relevant to the cities. Science, which was responsible for industry, also gave electricity, water supply through pipes, drainage and sewage system, telephones, radio and then heating, refrigeration, air conditioning and scores of other services which are daily multiplying. For a time it appeared that science has given a tool to man which makes it possible for him to lead a happy, healthy and leisurely life. Purified water on the tap, all wastes drained into the sewers, light and air with the flick of a switch. No more fetching the water from a well, no more carrying the wastes on the head, no more sultry hot days with hand operated fans, and no more retiring to bed with sunset.

The irony of the situation is that every new invention affects the lives of a very few people initially, but it projects an image of a wonderful life for everybody. So long as a very few people benefit, the inherent shortcomings of an invention do not become evident. Only when it reaches the mass scale does its defects show up.

For example, the water carriage system of waste disposal through pipes and sewers appeared to solve all sanitation problems initially when the cities were small and when this facility was available only in new settlements like civil lines and cantonments. But when the cities expanded and sewage connections were provided for all, then carrying such large quantities of refuse required bigger and bigger sewers and more and more water went to waste; and then the disposal of sullage into the rivers caused pollution of water there. Then the sewage disposal plants became too unwieldy and created a host of other problems. Piped water supply which appeared to be such a blessing as long as the cities were small and was available to a few, became an acute problem in big cities because enough water could not be found and processed to feed the ever thirsty pipe lines. Because of piped water supply the consumption and waste of water rose sharply. Piped water initially promised pure and tested water whereas well water was considered susceptible to pollution or infection. But with the phenomenal increase in the hand-

ling of piped water supply, and pollution of the source of water (river) and faults developing in pipe lines, the germs began to find their way into the water supply system. At present most water supply schemes in big cities are suspect. Those who can afford it drink boiled water. The recurrence of hepatitis disease in Delhi is attributed to the pollution of water with sewage. When such a pollution occurs in the water supply system it affects a very large section of population, who can do nothing about it; indeed who are bewildered as to what is happening and who should do something about it. It is not easy to rectify, or replace a faulty water supply system. On the other hand, a 'well' in the neighbourhood was much easier proposition to handle. One used to mix potassium permanganate in a bucket of water and hurl it into the well. For a few days one drank reddish water and then everything was all right. Even if one well went dry, one could walk across to the next well which was deeper, and with somewhat extra effort get the required quantity of water. But when the taps go dry, all one can do is to wait till the water supply comes on, for there is no alternative.

These two examples are enough to illustrate how the advent of other inventions like the automobiles, electric trains, telephones, etc., have brought havoc to the fabric of the cities. Nowadays we are concerned with the influx of a large number of people to the cities. The bigger the city the greater the influx. But what we do not seem to realise is that rate of rise of the means of transport—cars, buses, trains, trucks, autos, etc., is much higher than that of the population—about twice as much despite the oil crisis. Secondly, that the supply of basic life support systems—air, water and food, particularly perishable items of food, is becoming more and more vulnerable. Both these phenomena are the direct result of systems of growth we have adopted.

The thing to understand and appreciate is that the inventions of man which caused the industrial revolutions got applied to the cities without comprehending their implications because the basis was exploitation for gaining, consolidating and expanding 'power'. In that lies the cause of the phenomenal expansion of the cities, depletion of life in the villages, pollution of environment, inefficiency in the functioning of services, and inequity in the lives of people.

How far is the profession of Architecture responsible?

From the traditional standards of assessment one could say that what has happened to the cities is not the responsibility of architects except insofar as some ugly buildings have come up or some places are not functioning efficiently. But that way every profession can escape responsibility for what is happening. A doctor's job is to treat the sick when he comes to him. An architect's job is to design a building for the client who comes to him, and so on so forth. But an intelligent

human being's job, whatever his profession, is to foresee the shape of things which are emerging. Military strategists and planners have to do that all the time, for it is a matter of survival for them. Politicians have to sense the mood of electorates to win elections. But architects don't seem to think that they have an inherent social responsibility. They do bother about pleasant environment, public places, community centres and all that, but they do not seem to have undertaken to think that it is their job to conceive a structure of society compatible with the forces of science and nature and to create a physical environment which will ensure that structure.

Architectural profession has been traditionally conservative and slow to change. Indeed most of the time change has been forced on this profession by some rebels like Corbusier. An architect's image is formed by what he does and not by what he thinks. In the imagination of the public the man who designed the Taj Mahal was a great architect. Today if an architect gets the opportunity to design a 40 storey tower he considers himself very lucky because his work will stand head and shoulders above everyone else's, and glitter in the sun, and bring him fame and prosperity. It may be true that what he thinks influences his work, but if his thoughts are such that they go contrary to the current mode of thinking, or the requirements of his client, then there is not much he is likely to show for his thoughts.

The questions to ask in the present context really are as follows:

1. What does the profession of architecture think about the state of the urban centres?
2. To what extent does the profession own up the responsibility for present state of affairs?

The truth is that the profession in India *per se* does not think and, therefore, does not have any opinion in the matter. There is no evidence of a definitive statement regarding the state of affairs in the urban centres by the professional body of architects. Individuals may speak here and there but they count for very little. This also means that the profession does not own up any responsibility.

But responsibility is there whether the profession owns it or not. No one else is going to give that responsibility to the profession. With the change of times the role of architecture should have changed to have included in its purview all facets of space planning which affect the life on this planet. An architect may not be, cannot be, master of every science that brings about the change in society and space, yet the awareness of everything happening around him in space and time is important, indeed unavoidable, if he is to be the leader in matters of space organisation and in the pursuit of his professional commitments.

I would, therefore, like to put forward some facets which have come to my awareness and which I would like to share with fellow human beings:

1. The present growth pattern of the cities is self-destructive, and architects must share responsibility for it. It is evident by following just a few examples:
 - (a) Consider the Inter-State bus terminus of Delhi. Having been built on such a grand scale, even before it was put to use it was out of date. Today it is bursting at the seams, and at least half the systems on which its plan was based have stopped functioning. Similar is the case with practically all bus stations in this region including Chandigarh.
 - (b) The grand Subzi Mandi of Delhi built at Azadpur has created more problems than solved. Most glaring of these is that the new Subzi Mandi which was intended to be on the outskirts of the city has become part of the city by the growth caused by its location.
 - (c) The areas of Connaught Place and Chandni Chowk which were places of such old world charm have become an experience of nightmare. Too many activities and buildings have been built there to choke them.
2. The cities are causing greater differentiation in social and economic structure of society. In a runaway situation like the present growth of cities the privileged people do create areas of peace and tranquillity for themselves, and architects help in that. In this lies the genesis of the creation and growth of South Delhi residential colonies. It is every architect's wish to design such posh colonies without any thought as to where sustenance to these colonies will come from. Inevitably slums grow round them—slums live on colonies and colonies live on slums. Another phenomenon is that every architect hopes to build a super market or multistoreyed block of offices, or a Five Star Hotel. No one bothers to think what it does to the structure of society.

A study on Rehris—the mobile shops of India—done by me in Chandigarh revealed that these humble little shops provide a service of higher order than the big shops, and also that they bring about more equitable distribution of wealth unlike the big business houses. This type of study is not normally considered architectural, but it is.

The very sustenance of life in the cities is being jeopardised by the differentiated planning principles adopted by architects

For this I hold the Athens Charter and Le Corbusier also responsible. The architects now think in terms of residential areas and industrial areas, recreation areas and commercial areas, etc., where no other function than the ones specified may be performed. There are now no 'production areas'—the areas where vegetables and fruits are grown, and milch and meat cattle are reared. Such areas, in the minds of architects do not belong to the cities. These activities are for the villages. The argument presented is, of course, the land values in the city. But do the architects ever think as to whether spiralling land values are healthy for the city. Rising land values only provide opportunities for the architects to build higher and give more turnover for their efforts. The truth, however, is that such open spaces as are left in the cities come under heavy pressure for development or for turning them into parking spaces for the automobiles, and the villages where food is produced are pushed further and further from the heart of the cities. When the fruits, vegetables, milk, and meat reach the city they are stale or processed in factories, both resulting in loss of nutrition value. On the other hand, due to intensive development and increasing number of automobiles and factories, the city air has become unhealthy, the environment noisy and dusty, and the roads dangerous—thus jeopardising the life in the cities. Even the familiar birds are disappearing. The architects' pet beauty generating devices fit for cities are fountains, lawns, flowering trees, caged animals and neon sign. All these may be beautiful, as the skyscrapers may be, but they are not supportive of life which is the first requirement of the people.

Although there is often a cry heard from the people in power and also architects that the cities must be contained and the quality of life maintained or improved, no practical and positive steps to do so are taken by the profession at large. One solution often proposed is that new towns should be built on modern lines so that the growth is diverted into them. But it should have become clear by now that establishing new towns is an expensive affair and not conducive to success. Indeed new towns tend to be a drag on the old towns near which they are established, e.g., Gandhinagar, or if established away from existing towns have to be spoonfed for a great length of time before they become viable, e.g., Chandigarh. In all cases the dichotomy between the Urban and Rural Centres which was very thin earlier, is increasing causing the people to be attracted to the cities more and more strongly. Which architect would care to settle down in a village, or for that matter, which doctor, lawyer, film maker, furnisher, caterer? The reason is simple: All systems have been developed to sustain on concentration of services and availability of large population as clients and manpower.

Nothing is developed on the principle of dispersion. I, however, believe science and technology could and should be geared to do just that.

The urban systems promote enormous waste. All principles of Ecology are violated, and architects do precious little to understand this. This factor has come to light recently because of the energy crisis. Many thanks for that. For the urban systems were progressing, inevitably towards rapid self destruction. Now at least there is a search for alternative energy sources, and in the bargain we have begun to think of the wastes, and recycling. But the sophisticated thinking of which the profession of architecture is a part is still in the direction of:

- (a) Mass handling of wastes like big sewage treatment plants and mechanised system of refuse collection and disposal; and
- (b) Energy generation from atomic power plants or big solar plants, etc.

It is considered that if man can send satellites in space and can split the atom, and move many times faster than sound, then solving problems of energy and disposal of wastes should be quite easy. It is only a matter of time. On the face of it all these concepts look very exciting as does the sight of a shining car rolling down an assembly line from a huge factory. But we seem to forget that man is only human. Whatever advances may take place in science and technology, man's comprehension of his environment does not increase proportionately, only marginally. It is better that the science and technology are so applied that they remain in the service of man rather than overwhelm him with their enormity. Nature does not waste anything. Nature sustains on ecology. Wherever it is disturbed too much, great calamities have to be suffered. It is said that the creation of the great deserts is because of the excessive disturbance of nature caused by man. That may have happened because of ignorance. But the disturbance that is being caused now is in spite of enough knowledge with man. The big atomic plants produce wastes which are causing enormous problems of disposal. Huge airfields which are becoming bigger are causing their own disturbance to nature. The irony is that all these things do not necessarily lead to a good life. It is possible to create a pleasant environment for living in conformity with nature, which is the same thing as observing the ecological principles of nature or maintaining a balance between man, animals, and vegetation. In this respect a lot is said about preserving our forests and wild life, but little things which ultimately lead to big things are ignored. For instance, it is a common sight to see grass, leaves, and other vegetable matter which is produced as a waste from the open spaces, and trees, in the cities being

burnt. We accused the villagers of wasting cow dung by burning. But in the cities we are doing much worse. Cow dung is burnt to cook food. But grass, leaves and vegetable wastes in the cities are just burnt. These could well serve as food for animals if they were scientifically integrated in the planning of cities and provide much needed nutrients at your door-steps. Burning of any vegetable matter produces harmful smoke, and destroys useful food and manure. This example by itself may not bring about significant changes in the urban pattern. It only serves to suggest the adoption of an attitude to planning.

What must we, particularly architects, do about Development and Management of Urban Centres?

There are four organisational aspects:

1. Creating a Policy Framing Body of Architects;
2. Education of Architects;
3. Education and Participation of Public; and
4. Inter-state coordination agency.

Creating a Policy Framing Body of Architects

It is quite clear that individual architects can do precious little to develop and manage the urban centres. But individual architects can get together to understand the problems of cities and to formulate policies for solving these problems. So the first job of the profession is to create a *Policy Framing Body* for the urban centres. Such a body should be completely independent of political interference and should be immunised from commercial considerations. Its members should be intellectual professionals. It should not be a large body if it is to function efficiently, nor should its activities be secretive. It should frame policies, allow free debate on them by interested parties. I do not imagine any statutory powers for such a body to start with. No such powers are possible as there are far too many bodies like PWD, Municipal Corporation, Development Authority, Improvement Trust, Transport Corporation already functioning in all cities, and most of them work at cross purposes. There are no guiding principles nor any coordinating agency. Each body has its own mandate. The job of the professional *Policy Framing Body* would initially be to bring into awareness the overall problems of the urban centres, predict what is going to happen in future, and create guidelines for Development or control of Development. Gradually such a policy framing body may assume mandatory powers.

Education of Architects

Whereas the basic work of architects would remain unchanged,

namely the design and organisation of space for human use, the awareness of the problems of the modern times has to increase tremendously. Economics is not to mean merely the purse of the client, but the entire gamut of urban economics. Sociology is not merely good neighbourliness and provision of community centres, but also the social structure and changes in society. Sanitation and drainage is not merely disposal through pipes and sewers, but also what happens to all the accumulated wastes of the city. Transport planning is not merely provision of garages, roads, and parking spaces, but also the understanding of what is happening to our transport systems and how they are affecting the lives in the cities.

These few examples only serve to illustrate that the architects have to be exposed to the new awareness through education in an organised way. It cannot be left to the individuals to study for himself. Like in the military service, there should be organised *Refresher* courses for the architects. It should be mandatory to go through these to maintain registration. This is not an easy task, for there may not be many people available to conduct such programmes. But a beginning has to be made. Once enough material is collected on a certain aspect for communicating to the architects, the lectures could be delivered through audio-visual means and gradually become accessible to all.

Education and Participation of Public

It is necessary to educate not only the professionals but also the public regarding the urban problems and thereby obtain their participation in solving them. Indeed an educated public can lend significant support and suggest practical ideas in solving urban problems. Most of the time the public is bewildered as to why things are happening the way they are happening without being able to do anything about it. When a bus does not arrive, or the water supply stops, or the electric supply is cut off, or there is a traffic jam, the public can do nothing except be helpless spectators and sufferers. But if they know that such and such thing is likely to happen due to certain reasons, then they prepare themselves for it by making alternative arrangements. Now-a-days everybody seems to head for the big urban centres like Delhi, Bombay, Madras, etc., for jobs, industries or commercial activity. Everyone tends to think that if one wants to get on one has to go to the big cities and see about the rest afterwards. The public needs to be educated that such attitude leads to overconcentration of activities which ultimately harm the interests of the public by causing pollution, traffic jams, shortage of essential services and amenities. The awareness of the public will bring suggestions regarding dispersal, and such proposals as are framed with public participation will be implemented much more easily. Large quantity of housing now being built in the cities has practically no

public participation. But due to extreme shortage, people have to take what they get. The result is that everyone lives with a sense of deprivation and resignation. Most people criticise the houses they get mostly with justification. If we build multistoreyed flats which are not likely to get water on upper floors, or which do not provide for play spaces for children, or which do not make any arrangements for old people, etc., then the criticism is only justified. If a person has to travel everyday to work like sardines in a bus then the criticism is justified. So are many other criticisms regarding education, medical care, food supplies, garbage, etc., justified. Most of these problems need to be solved with public participation in decision-making process.

Inter-State Coordination Agency

The present problems of cities, particularly big urban centres are not confined to individual states. The pressures of growth transcend all borders, and are exploited not only by individuals but also by respective states. For example, Chandigarh which is a Union Territory city for over a decade is surrounded by the States of Punjab and Haryana. Both states, in spite of the periphery control act of Chandigarh, have established townships on the outskirts of Chandigarh within their boundaries taking advantage of the amenities of the city. This has caused a host of problems like water supply, transport, educational and medical facilities, and land prices. This sort of situation exists with greater force around Delhi also, and it can be said that the Delhi metropolitan zone extends to about 50 miles radius round the city. It is, therefore, necessary to establish interstate agencies for coordinating growth policies across the borders of the states.

In order that the development of the urban centres takes place in the right direction it is essential to lay down some guidelines of growth:

1. It should be recognised that the growth of urban centres is inevitable and, therefore, it is necessary to anticipate the quantum and plan for it;
2. Growth should be self-sustaining and it should not stress the existing urban centres or the countryside;
3. Growth must be on cyclic principle, that is to say, that nothing should be wasted, but should be recycled;
4. Growth must maintain contact with nature and should follow the nature's principles of ecology;
5. Growth should not generate unnecessary obligatory movement for survival;
6. Growth should inhibit concentration of activities and opportunities, but should promote *equity*.

The following paragraphs suggest how the above guidelines can be applied, though not in the same sequence. The sequence cannot be followed because the application of various outlines overlaps in different situations.

It is necessary to recognise what forces of growth are inevitable, and what can be prevented. For example, as the situation is today, the big urban centres are going to grow further, and their rate of growth is unlikely to be reduced substantially. Knowing this we should also realise that according to the present system of expansion all our services, amenities, and transport network is bound to get completely choked. Therefore, instead of preventing growth, we should evolve a system of growth which is basically self-sustaining—namely, each unit of settlement should have:

- (a) its own water supply;
- (b) its own sewage and garbage disposal;
- (c) its own growth system of essential and perishable items of food, *i.e.*, milk, vegetables, meat and eggs, etc;
- (d) its own shopping;
- (e) its own potential of job creation so that most of its residents—70 per cent—do not have to go somewhere else for earning a livelihood;
- (f) its own supply of energy to the extent possible by modern technology; and
- (g) its own facilities for education, health care and recreation.

In short, the aim should be that most people in a settlement are not compelled to go elsewhere to meet the daily needs of living, and earning a livelihood, and also as many goods as possible of daily needs are produced near the place of residence. This is not to say that people should be forbidden from going elsewhere. It is only to reverse the present trend which forces people to travel more and more just for survival. This is the key to solving most of the urban problems, and it is quite possible to do so. I have done a study for creating a unit for self-sustaining human settlements which makes it possible for more than 70 per cent of the residents to earn a livelihood by working in some activities near the place of residence, and where all the wastes are recycled. If this settlement pattern could be further augmented by supply of energy from natural sources—sun and air—then perhaps it may provide for full employment potential.

The rate of growth of cities should be anticipated and planned for to such an extent that there is always a place for the new arrivals. This is the only way to defeat the growth of slums, speculation and spiralling

land prices. At present the cities are growing in concentric circles with the result that the pressure on the centre or the heart increases with each successive ring of growth. This chokes the heart and is, therefore, disastrous. The natural growth is along the lines of communication. For example, there is maximum growth along the Grand Trunk road as it goes from Delhi to Haryana in the west and to UP in the east. The manner of this growth is very unhealthy. Some typical features are: (a) establishment of some industries on either side of the road, (b) establishment of some mixed marketing and repair activities connected with trucks, and (c) Eating establishments for truck drivers particularly near boundaries of a state. It is clear that this type of growth is largely speculative, unplanned and, therefore, destructive. The over-riding factor is the cost of land on the outskirts of a city and the possibility of commercial exploitation of that land. It has no consideration for providing all the amenities of living. All that is left to chance.

The right method would be to create linear pattern of growth, one side of road to provide for industry, commerce, and housing, and the other side of the road to provide for agriculture and animal husbandry. This is proposed to ensure balanced growth for production and consumption—as against the present pattern whereby the distance between the place of production and consumption keeps on increasing with the growth of cities. Second advantage of this pattern of growth is that there is going to be very little interruption in the movement of inter city traffic because agriculture and animal husbandry activities generate very little traffic.

We should re-examine the establishment of the residential colonies in all big urban centres to see how far they can be made self-supporting. *i.e.*, besides providing for education, health, community and shopping facilities, can they also grow their own vegetables, rear their own cattles for milk and meat, and can they create their own system of recycling their wastes? These activities, to whatever extent possible, should be implemented for they will generate employment on the spot and reduce the load on the transport system of the cities. They will also ensure the supply of fresh and nutritious food to the residents.

We should take definite steps to decentralise as many urban activities as possible. The present tendency is to find some place near the heart of the busy urban centres. For example, if the government offices of Bombay are moved from the Fort Area to the newly established Twin City of Bombay, this action alone will decongest the heart to a large extent. Many other commercial activities which have a dealing with the government will gradually shift to the twin city.

It is found that most of the urban problems arise out of the indiscriminate consumption of energy in one form or another. The argument

is that if energy is available and one can pay for it, then why not use it. Luckily the oil crisis has brought about the awareness that most of the sources of energy supply are not limitless. Indeed one is haunted with the fear that coal and oil reserves of the earth may be exhausted soon. The only unlimited source of energy supply is the sun and other natural phenomena which happen due to the sun, namely, wind, tides, rain and snow. Wind is used to be a source of energy for human use from times immemorial through wind mills and sail, canals were used for navigation. All these methods were non polluting quiet and beautiful. More and more research should be done on using natural and permanent energy sources and integrating them with the cities. For a country like India a canal running through the cities which is also used for navigation will only be a great asset. So will be the wind mills on top of the buildings.

It would be necessary to create some areas in the cities which are for exclusive use of pedestrians, and other areas in which only muscle powered vehicles can ply. This is the only way whereby the use of powered vehicles can be controlled, pollution reduced, and oil saved. At present most of the movement space has been taken for the movement of about 10 per cent people in motorised vehicles on roads. That is why the pedestrians and muscle powered slow moving vehicles keep on coming in the way of the fast moving motorised vehicles.

In new developments, total segregation of the movement of motorised vehicles from the pedestrians and muscle powered vehicles should be ensured. This can be done by lifting the movement of motorised vehicles to a higher level and leaving the ground level free for pedestrians and muscle powered vehicles. On the face of it this proposal looks very expensive, but a little imaginative approach reveals that it can not only pay for itself but also produce some revenue. This is how it can be done.

We know that a road surface is non-revenue producing area, and also that the revenue from the space adjacent to the road varies with the importance of the road. The more the traffic on the road the greater the revenue from the land. In the commercial areas where segregation of traffic is most essential if we lift the road on stilts, the space below the road becomes available for commercial exploitation. I have done studies to prove that the return from the space below the uplifted roads after allowing for cross traffic is more than enough to pay for the cost of building them.

In the end it needs be to said that the genesis of the large urban centres has been the easy availability of the energy supply (oil) from the ground and the invention of the internal combustion engine. The growth has been cancerous and is endangering the very lives of the people who reside there. It is important to reverse this process, but it is not easy to

do so for the expectations and habits of the people have changed. Therefore, a process of gradual transformation has to be started to: (a) divert the growth of cities in self-sustaining channels, (b) gradually decongesting the hearts of the cities, (c) reducing the difference between cities and villages, and (d) utilising clean renewable natural energy sources. □

Ahmedabad Urban Economy and Its Planning Perspectives

E. NARAYANAN NAIR

AHMEDABAD IS one of the growing cities of India, having the sixth rank in terms of population. The city has registered a significant population growth rate between 1951 and 1981 of about 3.78 per cent per annum, having the present population of about 25 lakhs. As a result of this urban sprawl, the area under the Municipal Corporation has grown from 52.98 Km² in 1951 to 92.98 Km² in 1971. About 90 per cent of the city population live in the eastern part of the Sabarmati river having a density of 19,785 persons per Km² as compared to the western side which has a density of about 6,643 persons per Km². The residential land use forms about 45 per cent of the city area and in the walled city it forms about 72.50 per cent.

The manufacturing industrial sector is one of the basic sectors of employment for the city economy, occupying about 45.39 per cent of the workforce in 1971. But it is to be noted that its share decreased over time, for, in 1961 this sector contributed about 50.58 per cent of the workforce. Again, we find that the growth rate of registered factories in terms of employment has shown a decrease between 1961 to 1971 but not in terms of units. The growth rate of units in the registered factory sector between 1961 and 1971 is about 3.73 per cent per annum as compared to the unregistered factory sector, which is growing at an annual rate of only about 1.60 per cent. The employment growth rate in the registered factory sector has shown a decrease by 0.88 per cent per annum. This is mainly due to the employment stagnation in the mill sector and the growing number of sick mills. Mills of Ahmedabad which contribute about 78.02 per cent of the workers employed in the manufacturing industrial sector in 1971 has shown a stagnating trend both in terms of units and employment. In 1961, 71 units had employed about 1.31 lakhs of workers having about 1843 average workers per unit. But in 1971 the units decreased to 67, employing only 1.19 lakhs of workers, thus decreasing

the average workers per unit to 1782.¹ This phenomenon of the stagnating trends of the registered factory sector should be a matter of concern for city planners.

It is also observed that the industrial base of Ahmedabad is diversifying. Even though, no indepth economic base studies are available at the city level, one of the available study indicates that during the seventies, industries like soft drinks, textile, furniture, printing, leather and metal products are the basic industries.²

The post independence industrialisation approach of development planning found the establishment of three industrial estates in the city periphery aimed at not only to develop the city hinterlands but also to decongest the city activity concentration. These growth points are at present well developed and act as industrial corridor for the city. But it is observed that in spite of the existence of these estates for the last 10 years only about 13 per cent of the city industrial units and 3 per cent of the industrial employment is located in these growth points and their backward and forward linkage with the city system is very weak, for, only 15.90 per cent of inputs are purchased from the city and only 10.41 per cent of the output is sold in the city.³

The city labour market is another area of much concern. It is observed that in 1971 about 28.32 per cent of the population is in the work force. In the absence of the city level estimate of the labour force, the state level urban area estimate of the labour force, *i.e.*, 29.35 per cent of the population⁴ is assumed to be true for the city too. Under this assumption, we find that about 0.23 lakhs of people are unemployed. It is also observed that about 61.14 per cent of the workers employed in the informal sector which employ about one half of the total work force is estimated to be under employed.⁵ The dual nature of the urban labour market and the lag in the employment growth rate as compared to the population growth rate is a matter of concern regarding the future development perspective of the city.

The end product of the development activities need to be examined with respect to the levels of living of the people. Even though, we experience a dearth of materials in this regard, the available informa-

¹*District Census Hand Book*, Ahmedabad, 1961, 1971.

²P.G. Pathak, "Delineation of Industrially Homogenous Regions of Gujarat: Comparison of Regional Industrial Activity", *Anvesak*, Vol. III, No. 1, 1973.

³Kashyap, *et al.*, "Industrial Estates in Gujarat, Input Output Association", *Indta*, Vol. I, 1976.

⁴Atul Sharma and R. Radhakrishna, "Unemployment and Poverty in Gujarat—A Case for Intervention", Key paper presented at the Gujarat Economic Conference, 1979.

⁵Radhakrishna, *et al.*, "A Study on the Levels of Living and Consumption of Liquor in Ahmedabad", Sardar Patel Institute of Economic and Social Research, (Mimeo.), 1979.

tion indicates that about 28.65 per cent of households in the city live in huts and about 20.92 per cent of the households live in chawla and both these housing types are categorised as slums.⁶ Since the size of these households is more than other households living in other type of housing units, we may confidently say that about 50 per cent of the city population is living in slums. The households form the major part of the informal labour market, for, only about 25 per cent of them work in the formal sector.⁷ It is essential to understand that among this section of the urban society the labour market is non-competitive, having less job mobility and exists a high level of social and vocational homogeneity which can be nothing but an extension of the rural social structure.

An important socio-economic implication of this tractionalised and non-competitive labour market is the level and pattern of the urban poverty. Taking the FAO criteria of the equivalent per capita monthly income to acquire 2250 calories per capita per day, it is estimated that about 90 per cent of these slum households are living in poverty.⁸ This phenomenon of urban poverty is accentuated through the asset distribution in the urban area, for, 96.61 per cent of the urban households possess only 54.69 per cent of the total asset in the urban area, whereas, 0.04 per cent of the households who are in the asset slab of 5 lakhs and above, control 6.65 per cent of the total urban asset.

One of the unhealthy and disruptive tendencies of our urban economy is the accentuated or of the dual economy, in which there are two different patterns of living as widely separated from each other as two different worlds. It is not a matter of some people being rich and others being poor, it is a matter of two ways of life existing side by side. The behavioural differences and the social and political tensions arising from the dual economy are too obvious to require description.

Against this structural problems of the urban dualism and the fundamental social problems of social and economic mobility of the majority of the people in our urban area, the role of the local body, the Municipal Corporation, is confined to that of the 'care taker', and Ahmedabad Municipal Corporation spend about 80 per cent of the total municipal expenditure on the maintenance and repair of the urban infrastructure and services.⁹ Ahmedabad local body is not an exception to the national level phenomenon of fiscal imbalance, which is the problem of inelastic revenue resources and the elastic expenditure influenced by the density and spread of urban growth. It is to be noted that only about 26 per cent of the total Municipal revenue is coming from the general tax

⁶Municipal Corporation of Ahmedabad, "Metropolitan Plan for Ahmedabad".

⁷Radhakrishna, *et al.*, 1979, *op. cit.*

⁸*Ibid.*

⁹Municipal Corporation of Ahmedabad, 'Annual Budget', 1979.

and about 74 per cent of it constitutes the indirect tax, indicating another aspect of the non-distributive approach of urban planning.

The fiscal imbalance of the local body accentuates with the growing phenomenon of diseconomies of the urban areas. Diseconomies, defined as the progressive incremental cost to provide the service due to the non-threshold size of the city do not limit the flow of activities to the urban areas, because these diseconomies often get transferred to the local body and state. This process of transfer of the urban diseconomies only bleaken the future of the local body.

The Ahmedabad metropolis has seen so far about five development plans. The first development plan prepared for 1967-69 by the Town Planning Department has emphasised on the Ahmedabad Baroda—Vapi Corridor development but failed to take off from the ground. The second development plan prepared during 1968-72 by the town planning department gave emphasis on a regional transportation network and conceived a new potential 'traffic corridor' between Kalol and Mehmada-bad. The third plan preceded the Urban Land (Ceiling and egulation) Act of 1976 known as the urban land ceiling master plan prepared by the Chief Town Planner, Gujarat.

The fourth development plan was the one prepared by the Ahmedabad Municipal Corporation for the period 1975-85. This development plan prepared for the municipal corporation area for an estimated population of 26.5 lakhs by 1984 is basically a land use plan with a detailed scheme oriented service and infrastructure plan. The last and the recent development plan available for the Ahmedabad metropolitan area is the development plan prepared by the Ahmedabad Urban Development Authority for a period of 20 years—1980-2001, with its emphasis on three-tier system of planning, *i.e.*, Mother city, the potential growth centres/dormitory towns and the Agricultural zones in the urban area.

All the above development plans have approached the urban development within the frame of a positive approach to land use planning and service and infrastructure planning. It may be pointed out that the objectives, planning approach and the financial and physical resource allocation are largely consistent. To cite a case, the draft development plan (1975-85) of the Ahmedabad Muncipal Corporation has listed out about seven objectives like: (1) provision of minimum civic amenities to all the citizens of the city, (2) raising the level of amenities and its even distribution in all areas of the city, (3) removal of lop-sided development including pulling out of population from densely populated areas, (4) regulation of concentration of industries, (5) taking special care of weaker sections including slum dwellers, (6) optimum utilisation of existing amenities and (7) removal of spatial disparity of services and amenities of the city. Against these objectives the plan has a total sectoral outlay of Rs. 19,874 lakhs and about 36 per cent of it is allocated to

the provision of amenities and about 21.58 per cent is allocated to traffic and transportation sector. It may be noted that either the strategies or sectoral allocation of budget are not oriented to realise the set of objectives laid down in the plan.

All the above listed development plans thus lack a sound integrated approach and strategy for the urban development encompassing an urban resource plan besides the urban land. The basic socio-economic issues of the urban areas and its surrounding environs are left out in the plans thus devoid of a realistic planning perspective.

Against this urban reality, can the planner place himself and ask the question: Who is the client of the planner? What should be the approach to urban planning? Will the efforts of the planner, if confined to the non-socio-economic reality of the urban society, be rewarding?

If we accept the social problem oriented approach to planning, can we deliver the goods? If not, what is to be done?

A primary requisite of planning is that it should look at current reality and the future probability. Perception of the present and vision of the future should not be dictated by illusion or delusion. The call of the time is that we planners should accept the social reality and get wedded to the social problems and issues. The structural problems of the urban dualism cannot be treated as transitional, for unless conscious efforts are made it will lead to a process of mutual poisoning.¹⁰ We can not any more afford to take the stand that social problems and issues are not the concern of the planner or urban planning does not have socio-economic and political connotations.

It is this structural problem that our present day urban planning cannot answer, it is pertinent to understand that the basic pre-conditions for the success of the service/infrastructural development planning approach is the growth in the level of income and its better distribution.¹¹

To meet the present problems of urban poverty, the physical manifestation of slums, congestion, social tensions, etc., we have to re-orient our present day planning approach to the human needs, to meet the larger portion of the needy people for whom planner should devote its services. For this purpose, an approach which will encourage social and economic participation of the urban mass is necessary and such an approach should be able to exploit the social and economic potentialities of the urban areas for their socially desirable development. □

¹⁰Schsmachar, *Small is Beautiful*, Faber and Faber, 1975.

¹¹E. Narayanan Nair, "Growth Centre Concept and Development Planning", *Artha-Vikas*, July-Dec., 1979.

Attitudes of Urban Workers Towards Visitors from Home Place: The Case of Calabar, Nigeria

EDET M. ABASIEKONG

ONE OF the characteristics that has been repeatedly imputed to African migrants in general is that wherever they move to they never entirely forget their place of origin. In his study of rural-urban migration in Ghana, Caldwell (1969, p. 140) has said that:

When the migrant has reached the city, found a job, and established himself in reasonably satisfactory housing, he has usually not completed a once-and-for-all operation. Very few migrants begin a new life and forget the old. On the contrary, for most there are continuing links of all kinds with the village; very often the town is regarded as a kind of sojourn. The roads are thick with many lorries full of rural-urban migrants temporarily returning to the village.

Referring to kin and community in Africa, Lloyd (1969, p. 188) has observed that young Africans frequently assert that the advantage of living far from the family compound lies in freedom from the persistent and less reasonable demands of their kin. They do not claim that their general responsibility can be evaded. Distance enables them to plan their expenditure on their families, directing their resources to the most worthy causes. Continuing, Lloyd (1969, p. 184) has also said that the well-educated men and women of the elite, the skilled and unskilled factory workers, the clerks and teachers usually live in the modern town, far from the compounds of their parents and brothers. Yet in spite of the differences in roles and distances separating kinsmen, the urban-dwelling West African seems to maintain a very close relationship with the remaining members of his extended family in the rural areas.

Quite often the maintenance of such close relationships have included among other things home visits, rural property ownership while in

town, receiving of visitors from home, societal affiliations in home-place, and remittance of money to family, parents and relatives. In their study of the nature of urban-rural ties among African migrants, Gugler and Flanagan (1978, p. 64) have observed:

The link between sons abroad and their home community is expressed in many ways. The migrant visits his home; he welcomes visitors from the village; he helps new arrivals to get started in the city. He returns to his home area to find a bride. Messages flow to and fro. Money and goods are taken to the village or sent there through trusted intermediaries; presents are received in return. The urbanite builds a house in the village; he plans to retire there; he wants to be buried in his home.

Recent trends in Nigeria, however, tend to indicate growing reluctance on the part of urban workers to welcome visitors from home indiscriminately. With the ever increasing high cost of living in most Nigerian towns coupled with scarcity of houses, the old value of accommodating visitors from home appears to be eroding. Some young men and women working in towns are said to have informed parents and other relatives not to visit them without their consent. Stories are even told of instances where sons and daughters working in towns go to the extent of turning back parents and relatives who are in the habit of visiting them without previous notice or without their consent.

All these, however, have been within the realms of speculations and hearsays. As yet not much has been done empirically to ascertain the present attitudes of urban workers in Nigeria towards visitors from home. This study though exploratory in nature due to the limited nature of the sample is an attempt to empirically assess the attitudes of urban workers in Calabar towards visitors from home.

THE TOWN OF CALABAR

Calabar was constituted one of the Nigerian nineteen state capitals in 1967 soon after the break-out of the Nigerian Civil War. Since then it has witnessed an influx of migrants both skilled and unskilled over the past ten years.

The change in status of Calabar is evidently a major source of its attraction. As the state capital, especially since the end of the civil war, it has undergone a remarkable transformation. Roads have been reconstructed and widened; better and imposing buildings have been erected; industries have been set up; and more jobs have been created. All of these factors help to account for the popularity of Calabar over any other area—rural or urban in the Cross River State, and the pull it has

exerted on migrants.

The predictable increase in population has brought in its trail several problems. There are not enough accommodations. The available accommodations are rented at exorbitant rates. There are not enough jobs for skilled workers, let alone thousands of unskilled applicants. Facilities such as electricity and pipe-borne water are agonisingly in short supply. Food is scarce and costly. In short, although reliable data for comparison are not available, costs of living in Calabar seem to be as high (if not higher) as those in the older Nigerian cities such as Ibadan, Lagos, Kaduna and Enugu. All these problems appear to have affected urban workers' attitudes towards visitors from home which this study investigates.

METHODOLOGY

The data presented in this study were derived from a general survey of urban workers in Calabar carried out during the later part of 1979. All two higher institutions of learning—the University of Calabar and the College of Technology, and 7 ministries were selected from the existing 12 ministries and were used for this study. The 7 ministries were selected because they had the largest worker population than the remaining five. Questionnaires prefaced with a brief and polite explanation of the study and instructions on how to complete them were administered by trained interviewers on all established workers found in the 7 ministries and the 2 institutions, during office hours for a period of two months. Initially, 535 workers were interviewed in the nine locations during the two weeks' interview period. However, when the completed questionnaires were examined and edited, 35 of them were found unacceptable due to numerous uncompleted items. As a result, the final sample was made up of 500 urban workers.

The analysis that follows is restricted to the two questions which the migrant urban workers were asked:

1. "Based on your experience as urban worker, what is your attitude generally towards visitors from home place? Approve, disapprove or undecided."
2. "Apart from your attitude towards visitors from home generally, what is your attitude towards these categories of visitors from home?"
 - (a) Your immediate extended family member, *viz.*, parents, brothers and sisters;
 - (b) Distant extended family members, *viz.*, uncles, cousins, aunts, nephews and friends?"

Independent Variables

An attitudinal study such as this could not be properly understood without looking at some key independent variables. In this study, three independent variables—sex, marital status and age were considered very fundamental and relevant in explaining whatever attitudes the urban workers hold. Perhaps a brief rationale for their relevance is necessary.

Sex

Culturally in Nigeria, it is believed that females should not shoulder heavy responsibility such that constant visitors from home entails. As a matter of fact, the belief is that though they may be wage earners, females are generally dependent. However, there is always an exception to this view or belief. For instance, close relatives such as fathers, mothers, brothers and sisters are usually more welcomed than other distant relatives and other visitors. In using this variable, it was hypothesised that female workers would disapprove of visitors from home than male workers.

Marital Status

In most urban Nigeria, being a single worker does not absolve one of the numerous problems of urban living. It may only lessen one's problems relatively to that of a married person. This explains why most men leave their wives behind at least temporarily when they move to urban centre for employment.

Since a married person may have to share one small room with a wife or husband, children and at times house servants, and on top of this, visitors, it was hypothesised that married workers would be less favourably disposed to visitors from home than unmarried workers.

Age

Generally, experience has shown that young urban workers are more hostile towards visitors from home than older workers. They usually prefer to be given the freedom of living their life the way they want it. They loathe inconveniences which often accompany receiving visitors from home. Apart from the fact that they may not have enough accommodation, money, and other facilities required to cope with problems posed by visitors from home, they appear to be emotionally not yet mature to contend the frustrations of having to deal with constant visits by home people. It was thus hypothesised that older urban workers would be more favourable to visitors from home than younger urban workers.

FINDINGS

The 500 urban workers in this study were asked to state from their experience whether they generally approved or disapproved of the idea of visitors from home, or whether they were undecided on the matter. As Table 1 shows, slightly above two-thirds—339 (68%) of the respondents disapproved of visitors from home while less than one-third—114 (23%) approved of the visitors and 47 (9%) remained undecided on the issue. According to these data there appears to be no doubt that urban workers studied are not favourable to visits by home people.

This resentment of visitors from home by the respondents may not be unconnected with the numerous problems these workers suffer in Calabar. As stated earlier, Calabar is seething with problems. For example, there is acute shortage of accommodation. The few that are available are extremely costly, and both food and non-food items are expensive. These and a desire by many workers to save some money for other needs appear to account for the unfavourable attitudes they have shown towards visitors from home (Table 1).

TABLE 1 ATTITUDES OF URBAN WORKERS TOWARDS VISITORS FROM HOME

<i>Attitudes</i>	<i>Number</i>	<i>Percent</i>
Approve	114	22.8
Disapprove	339	67.8
Undecided	47	9.4
TOTAL	500	100.0

Also a fundamental reason for the general negative attitude towards visitors from home can be due to the fact that urban workers in Nigeria never forget about home whenever they move to town. They visit home regularly. During these visits money and goods are taken to the village or sent there through trusted intermediaries. As observed by Aronson (1970):

Whether economic advantages or social attraction is the dominant motive for nourishing strong ties with a given rural area, the commitment is usually articulated in an ideology of loyalty to home. The deviant is confronted by people from his area of origin proclaiming this ideology and bringing pressures to bear on him to continue to recognise his responsibilities. The man who has not returned to his home for some time is urged to do so by other mig-

rants from his village; he may be visited by a delegation from the village, who entreat him to return.

And talking of home visits, it has been observed by Adepoju (1974, p. 394) that distance from the place of origin does not have much influence on the frequency of visits.

While the attitudes of the workers towards visitors in general may be negative (as has been the case in this study) their attitudes towards some categories of visitors from home may be favourable or positive. For example, it would be wrong to assume that regardless of what inconveniences it would cause them urban workers would disapprove of their parents' or brothers' visits as they would of friends' visits. To find this out, the second question under methodology was asked. Table 2 presents the findings on this question.

TABLE 2 RELATIONSHIP BETWEEN TYPES OF VISITORS AND ATTITUDES TOWARDS VISITORS FROM HOME PLACE

<i>Attitudes towards visitors from home place</i>	<i>Immediate extended family members</i>		<i>Distant extended family members</i>		<i>Friends</i>		<i>Total</i>	
	No.	%	No.	%	No.	%	No.	%
Approve	63	51.6	35	25.9	16	6.6	114	22.8
Disapprove	48	39.4	84	62.2	207	85.2	339	67.8
Undecided	11	9.0	16	11.9	20	8.2	47	9.4
TOTAL	122	100.0	135	100.0	243	100.0	500	100.0

The Table shows that among the three categories of visitors, immediate extended family members comprising parents, brothers and sisters were the most approved (51.6%), followed by distant extended family members made up of cousins, uncles, nephews, nieces and aunts (25.9%), while friends was the least approved (6.6%) category of the visitors. Conversely, while immediate extended family members were the least disapproved category, friends and distant extended family members respectively were the most disapproved categories of visitors by urban workers.

The finding reported here seems to reflect the cultural reality of the Nigerian society. In other words, an urban worker can afford to be indifferent to a friend visitor, but he can rarely ignore or mistreat visitors from his immediate extended family circle without incurring negative sanctions, or without being subjected to social pressures to con-

form. While he may mildly resent visitors belonging to his distant extended family circle, he does not totally disapprove of them without drawing sanction of a milder nature also.

As mentioned earlier, the relationship between sex, marital status and age, and the workers attitudes towards visitors in general from home place were examined. Tables 3, 4 and 5 that follow present whatever relationships may exist.

TABLE 3 RELATIONSHIP BETWEEN SEX AND ATTITUDES TOWARDS VISITORS FROM HOME PLACE

<i>Attitudes towards visitors from home place</i>	<i>Sex of Respondent</i>					
	<i>Male</i>		<i>Female</i>		<i>Total</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Approve	78	22.6	36	23.2	114	22.8
Disapprove	240	69.6	99	63.9	339	67.8
Undecided	27	7.8	20	12.9	47	9.4
TOTAL	345	100.0	155	100.0	500	100.0

Generally, as shown in Table 3 there is no statistical significant difference between male and female urban workers in their attitude towards visitors from home. Both male and female workers in the sample seem to disapprove of it than approve or remain unopinionated on the issue. However, while there is no significant percentage difference between males and females and their approval of such visits, percentage-wise more males than females tend to disapprove of it. And more females than males appear unable to disclose their attitudes towards visitors from home.

The fact that more male than female workers in our sample disapprove of idea of visitors from home needs some explanation. Traditionally, in the Nigerian society, it is the male more than the female who shoulders the bulk of extended family responsibilities. In other words, more is expected of a male than of a female. And even when a man moves to town, he is persistently worried by numerous visitors from home than a woman worker is. Such visits as mentioned earlier are rarely conducive to any systematic and rational planning by the male worker. Besides such visits are often both emotionally and financially costly for the male who may be forced to develop a hostile attitude towards visitors from home.

Besides, while visitors from home may be hesitant to visit a married female worker in the town since this may not be acceptable to her

husband, they are rarely reluctant to visit a married male worker. In Nigeria the accepted norm is that a wife apart from being subservient to her husband, should always welcome her husband's relatives without frowning. Nevertheless, these visitors constitute additional burden and strain to their male relative who is married and may have children. Finally and more importantly too, it is not customary for visitors to expect heavy entertainments from a female host. Instead, and in many cases she is offered gifts in kind and in cash by visitors, whereas the obverse holds true for a male host. Also visitors (except very close ones) rarely stay overnight with a female worker in town. Even if they stay, such stay is usually very brief. Thus the chances of visitors from home creating serious problems for a female worker in town are very slim compared with that of a male worker.

TABLE 4 RELATIONSHIP BETWEEN MARITAL STATUS AND ATTITUDES TOWARDS VISITORS FROM HOME PLACE

<i>Attitudes towards visitors from home place</i>	<i>Marital Status of Respondent</i>					
	<i>Married</i>		<i>Single</i>		<i>Total</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Approve	71	23.8	43	21.3	114	22.8
Disapprove	196	65.8	143	70.8	339	67.8
Undecided	31	10.4	16	7.9	47	9.4
TOTAL	298	100.0	202	100.0	500	100.0

An examination of the data in Table 4 reveals that there is some relationship between marital status and the attitudes of the urban workers towards visitors from home. More single than married workers tend to disapprove of the idea.

Normally more single than married urban workers would be expected to show a favourable attitude towards visitors from home. It appears that elements of emotional maturity, financial security and ability to accept responsibility have something to do with more single than married workers disapproving of the visitors from home. Most of the single workers live in single bedroom apartments with no cooking utensils and facilities. Those who cannot afford even a single room apartment squat with friends, often in a rather congested living condition. For the most part, these people eat outside whenever they feel like eating. This type of living condition of the single workers does not dispose them favourably to receiving visitors from home. Apart from this, a greater number of the single workers are those in

lower cadre of the salary structure. They rarely have enough money for their basic needs let alone afford the usual costly entertainment for visitors from home. Also, because they are younger than married workers, they may not possess the emotional maturity to cope with all the inconveniences and frustrations concomitant with dealing with visitors from home.

TABLE 5 RELATIONSHIP BETWEEN AGE AND ATTITUDES TOWARDS VISITORS FROM HOME PLACE

<i>Attitudes towards visitors from home place</i>	<i>Age of Respondent</i>									
	<i>15-25</i>		<i>26-35</i>		<i>36-45</i>		<i>Over 45</i>		<i>Total</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Approve	57	18.6	38	27.6	15	34.9	4	30.8	114	22.8
Disapprove	211	69.0	95	68.8	25	58.1	8	61.5	339	67.8
Undecided	38	12.4	5	3.6	3	7.0	1	7.7	47	9.4
TOTAL	306	100.0	138	100.0	43	100.0	13	100.0	500	100.0

Table 5 shows that regardless of age, most people in the sample disapprove of the idea of visitors from home. It seems, however, that people aged 36-45 and over are less prone to this attitude than others. The relationship between age and attitudes of the urban workers toward visitors from home reported here appears to be congruent with the reality of urban life in many Nigerian urban centres. To start with, it is not very surprising that people aged 15-35 are more inclined to disfavour visitors from home than those aged 36 and above.

People in the former age cohort tend in most cases to be those who are either single, engaged or just married without children or at most with one child. They are those who frequently live in one bed-room house in the town. In most cases, those of them that are single, as mentioned earlier, do not have cooking utensils and do not cook their meals. Rather they prefer to eat in canteens attached to their place of work or in cheap restaurants whenever they feel like eating. Because of this living condition they find it very difficult to be inconvenienced by visitors from home, especially as such visitors would mean their making new feeding and sleeping arrangements which these workers cannot afford. In other words, it appears that people in this age group are more desirous of freedom from obligations arising from visitors from home. On the other hand, it seems that people in the later age group are more emotionally mature and financially solvent (though not always) to cope with the strains and stresses of visitors from home than those in the former age group.

It can also be explained that people aged 36 and above may have had sustained and extended connections—social, economic and political—with home and as a result can be more sympathetic towards visitors from home than those aged below 36. Besides, at the age of 36 and over, most workers must have settled in the town; must have occupied more than one bed-room; and must have possessed cooking utensils; and consequently may be more at ease and better disposed to receive visitors from home than the younger workers without these facilities.

CONCLUSION

In conclusion, this study has shown that, at least in one area of the country, the high cost urban living has exerted negative consequences on a cherished traditional value—indiscriminate accommodation of visitors from home by urban workers. Contrary to what used to be the case in the past, urban workers as demonstrated in this study are beginning to value individualism which is one of the known characteristics of urbanism. The new political, social, and economic organisations which are a few of the imperatives of modern urban living, must have contributed to the negative attitudes urban workers in this study have shown toward visitors from home.

In spite of the apparent modifications of the pre-existing attitudes towards visitors from home reported in this study, one must not forget that in almost every effort towards social change, there is always the reality of anti-forces towards change. In other words, there is always the possibility of movements inspiring counter-movements. This possibility of counter-movement in a social change situation is what Smelser (1967, p. 695) refers to as 'operation of social control'—one of his determinants of processes of change. Smelser (1967, p. 695) describes the operation of social control this way:

As leaders of reform movement well know, their efforts to mobilize do not automatically result in change, but encounter a variety of resistances. Various authorities for instance, government officials, courts, community leaders, religious agencies, and the press—are not indifferent to efforts of groups to change society. They may be hostile to the aims of the reform movement, or they may be exposed to counter-movement, to the proposed change.

Thomas and Znaniecki (1969, p. 589) arguing along the same vein have stated:

The appearance of the new individualistic attitudes may be counter-acted, like every effect of a given cause, by the effects of other

causes; the result is a combination of effects which takes the norm of a suppression of the new attitude; the latter is not allowed to remain in full consciousness or to manifest itself in action, but is pushed back into the subconscious. Causes that counteract individualization within the family are chiefly influences of the primary community of which the family is a part. If social opinion favors family solidarity and reacts against any individualistic tendencies, and if the individual keeps in touch with the community, his desire for recognition compels him to accept the standards of the group and to look upon his individualistic tendencies as wrong. But if the community has lost its coherence, if the individual is separated from it, or if his touch with the outside world makes him more or less independent of the opinion of his immediate milieu, there are no social checks important enough to counterbalance disorganization.

All these considerations render any clear-cut prediction of total rejection of visitors from home by urban workers impossible in spite of a clearly predictable worsening urban conditions. The existence of various organisations such as age-groups; ethnic unions; women associations; village and clan organisations in urban Nigeria including Calabar all tend and will continue to work counter to any serious attempt by urban workers to reject this culturally based value of accepting visitors from home. Besides, the regular visits to home by urban workers already mentioned appears to be a factor capable of softening any negative attitude urban workers may hold towards visitors from home. Thus in the final analysis unless these counter forces cease to operate or are no longer potent, it is doubtful if the demands of modern urban living alone will lead to a rejection of visitors from home in Nigeria. In any case, further research should be carried out in other areas of the country. The results obtained from such studies should be able to improve the prediction of the impacts of urbanization in Nigeria on traditional values beyond the one looked at in this study.

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*Calcutta Corporation's Property Taxation: A Story of Loss of Potential Demand**

MRINAL KANTI BHATTACHARYA

THE NEGATIVE opening balance of (—) Rs. 0.38 crores in the budget estimate of the Municipal Revenue Fund of Calcutta Corporation in 1969-70 has snow-balled to (—) Rs. 34.73 crores in 1980-81. It appears that the local body is thriving by fiscal indiscipline in the management of different intra-and inter-institutional accounts resulting in a travesty of the budgeting practice. But this steady deterioration of local public finance has taken place amidst an unpublicised older story of regular loss of potential revenue of property tax due to delay in finalisation of annual assessment. Such a situation has been found to be running since 1961-62 and it is presumed that the story might be as old as the date of enforcement of the present Calcutta Municipal Act 1951.

Based on estimates of recent times it has been found that the Calcutta Corporation has experienced an annual average loss of property tax revenue of Rs. 2.61 crores resulting from uncreated supplementary and Fresh Demand bills. Besides loss of revenue it has serious implications in inter-personal fiscal justice because the negative tax burden of such uncreated demand do not flow evenly to all. Moreover, there is no one comprehensive register of demand bills created and collection in Calcutta Corporation, as in Bombay and Delhi, to show the annual picture of the rate-payers, unit by unit, in respect of local tax incidence. All these have resulted in grotesque mal-administration of discriminatory nature in property taxation of Calcutta Corporation.

Such a continued lag in local administration running under the over-all surveillance of the State Government is an anachronism in modern public administration. The absence of administrative accountability in the Calcutta Corporation's top management and scant internal

*The article is based on a two-year research report on Calcutta Corporation's property taxation done by the author as a Senior Fellow (1976-78), Indian Council of Social Science Research, New Delhi, at the Indian Statistical Institute, Calcutta.

research (like internal audit) failing to focus the results of an organisation's performance before the key centres of decision-making channel vertically up to Secretary, Department of Local Government and Urban Development are the spot reasons for lack of knowledge of such continued inefficient administration.

AIMLESS RE-ASSESSMENT

Calcutta Corporation has about 1,36,000 assessment units. In the quarterly billing system each property receives its property tax demand in two half-share bills meant for owner and occupier. But in almost all the cases both the bills are to be paid by the owner. A unit of assessment, therefore, receives eight regular bills per year. But this is not all. This regular bill is what is known as Preliminary Demand bill or simply PD. This levy is assessed by rating on the last-finalised annual value of the property determined by valuation on rental basis. There is the system of general revision of assessment, commonly known as GR, at an interval of every six years. This re-assessment continues in a cycle as per assigned wards for each quarter of six years according to governmental order. Once a six-year cycle of GR is over the following cycle catches up. Again, side by side with this six-yearly GR there is the system of intermediate valuation, with Inter as the usage, of those assessment units which have undergone some change. Inspectors of the Assessment Department roaming throughout the 100 wards of the city are regularly doing Inter wherever they can detect such cases. The revision of assessment of all assessment units by GR, and also Inter where due, is completed by the assessment inspectors within the scheduled time of governmental notification. But this is where regularity ends and irregularity begins. The follow-up works of valuation are all clogged up and post-valuation administration is completely aimless. According to the assessment procedure there is the provision of lodging objection to newly fixed annual value. And whether objection is lodged or not all are kept in abeyance for the time, when objections are being recorded and the statutory time-limit is of little importance. Unobjected cases will also be kept up in the shelves.

In Calcutta, hearing of objection is treated as a quasi-judicial function. The assessment officers do not review the objections. A band of five, six or seven special officers, varying from time to time as made available by the State Government, do the hearing job as per the system of allotment of wards to each. Valuation by GR or Inter does not aim at an administrative time-schedule for bringing in new demand. Whether objection is lodged or not the annual value for rating of PD is stuck to the last-finalised value. In other words, while new valuation is progressing every month finalisation is not keeping pace. Rating on

old value continues to remain till the process of fixation of new demand is over following finalisation of annual value by hearing and consequent calculation. A rate-payer can, however, also take this finalised value to the court of law.

The second part of the story is that new demand does not follow even for all hearing-finalised cases. Once the hearing for finalisation of newly-fixed value is completed by the Special Officer, the result is incorporated in a statement form called Order Sheet for calculation of new PD by applying the levy of appropriate rate of tax. But here calculation cases pile up and only a fragment is completed to make the new PD effective from the following quarter of the year. An advice is sent to the mechanical data processing centre to this effect. This new PD was, obviously, due at an earlier quarterly section of the year depending upon the GR cycle or time of Inter. A difference demand for the intervening period lying between the quarters for PD due and PD made effective becomes due to the Corporation. This matter of difference demand is also incorporated in the Order Sheet. And for this another advice, for supplementary demand bill, is made to the appropriate unit of the Assessment Section. This supplementary bill is written by hand. The unobjected cases are also processed in Order Sheets with substantial, erratic lapse of time.

Besides PD and Supplementary Demand there is a third type of bill known as fresh bill. This is not, of course, a new demand but what may be called freshly determined (mostly) PD or supplementary or even earlier fresh bill which was withdrawn due to some defects in the bill. Bills can be withdrawn for several reasons. For example, a vacant land will get remission for the occupier's share. All bills for such properties will first be issued in two quarterly shares and then the occupier's share will be withdrawn: similarly, properties lying vacant for some time will be entitled to vacancy remission of occupier's share; on application by the rate-payer such bills will also be withdrawn. Once a bill is withdrawn steps will be taken for inquiry, report and hearing by assessment officers for appropriate remission. After finalisation by assessor, fresh bills will be issued covering the entire period. Here again, the withdrawn bills are also not pursued according to a goal-oriented administration to collate the assessee's of withdrawn and Fresh bills.

Assessment of property tax is to lead to despatch of rate bills. It is unfortunate that the Calcutta Corporation has not completed a sizeable portion of year's assessment work yearly for many years now. The delay in finalisation of assessment work by hearing of objections and remission cases runs through all functional units upto writing of supplementary and fresh bills. Such sluggish administration is resulting in mounting gaps in creation of supplementary and fresh demand,

There is no system of formal closing of assessment hearing of any GR or any year's Inter or annually withdrawn bills by decisions and follow-up work upto despatch of bills. The chaotic nature of assessment hearing is seen in a study of valuation review cases made ready in April 1977 for special officer V. It has been found that out of 67 cases, 54 are GR and 13 Inter. The GR cases range from 19 number in 63-64 second quarter to 7 in 72-73 third quarter. In Inter cases the range is one number in 62-63 fourth quarter to another in 75-76 fourth quarter with others in-between. It is easy to see that different ratepayers cannot but be affected differently in matters of levy of due rate demand under such a situation. What is still more alarming is that there is no one register in the Corporation which keeps a record of rate-payers serially in respect of all demand bills issued to them. Records are maintained on what has been done in a quarter. One cannot know readily from these quarter-wise record books as to where two neighbours stand in respect of Corporation's dues from them by way of total of all demand bills and payments made thereof. The result of this incomplete tax assessment running since long can be expressed in two forms: (a) inter-personal inequity in tax demand, and (b) colossal loss of potential revenue by uncreated demand. The first one is a corollary of the second but it requires special attention because, from value point of view, it warrants immediate attention.

COLOSSAL LOSS

An attempt may now be made to estimate the loss of potential revenue by continued uncreated bills in respect of supplementary demand. The first thing to know is the total number of potential annual supplementary demand cases from new valuation of premises. The simplest way to derive this annual figure is to start from one-sixth of the total assessment premises as the annual quota in six-yearly cycle of GR and add to this the average number of Inter cases (which have been found to be 3.6 per cent of the total assessment units) to find out annual Supplementary demand cases. The number of annual GR and Inter cases will be 22,667 and 4,896 respectively in relation to 1,36,000 assessment units. The total number of GR supplementary demand cases will, however, be less than this because the assessed value will not be enhanced in re-valuation in some 5 per cent cases having 'Fair' rent for mostly rent-controlled premises. This leaves the total at 21,534 for review by hearing and follow-up actions in Order Sheets. Again, allowance is also to be made for hearing restoration of old value cases. The annual supplementary demand cases have been found to be 84 per cent in a survey of 527 cases chosen by systematic sampling from Order Sheets' cases. The total number of annual supplementary demand

cases from GR and Inter can be taken as 84 per cent of (21,534+4896) or 22,201.

The above shows that in the recent period there are annually 22,201 potential Supplementary demand cases. To this is to be related the number of cases billed out annually in order to determine the annual gap. The number of Supplementary demand cases billed out has been found to be far less than this because of lag in the work-stages of assessment in hearing, rate calculation as well as writing of bills. An estimate of the cases billed out has been made from the annual number of Supplementary bills issued by the Corporation and sample study results of Order Sheet cases depicting the number of bills per case. The study has been done separately for Calcutta (proper) with 91 wards and Tollygunje. The average annual number of Supplementary bills issued in Calcutta (proper) in sixteen years from 1960-61 to 1975-76 is 1,27,152 with average bill value as Rs. 38.75. The study of 383 Supplementary bill case samples in respect of Calcutta (proper) out of 527 cases from Order Sheets shows the average number of bills per case as 39.6. The Supplementary bill value per case is, therefore, a figure of Rs. 1535. The average annual number of cases billed out for these 16 years ending 1975-76 can, therefore, be calculated as 3,211. Now, the number of new demand cases for Calcutta (proper) in the total of 22,201 cases is 16,291 and the number of cases billed out is 3,211. The potential Supplementary demand gap for a recent year can, therefore, be estimated as 13,080 cases or Rs. 2.01 crores. Proceeding like this for Tollygunje with estimated Supplementary bill value per case as Rs. 433 the gap is found to be Rs. 0.21 crores. The total annual gap in Supplementary demand creation in Calcutta Corporation is, therefore, Rs. 2.22 crores.

A similar lag also persists in creation of Fresh bills in lieu of bills withdrawn after issue. The Assessment Department of Calcutta Corporation withdraws bills from the Collection Department in Requisition Books. But the final act of issue of Fresh bills, after the lapse of time taken in decision, is not recorded in these books. There is no comprehensive record book again to show the results of withdrawal and re-issue of bills serially in the name of rate-payers. The serious problem of inter-personal equity is also equally prevalent here as all withdrawn bills are not administered.

It may be argued that over a period of time there must be a parity between bills withdrawn and Fresh bills issued after making allowance for the correction factor incorporating the reasons of withdrawal. This allowance pattern has been estimated by a study of the Fresh bills issued in the third quarter of 1977-78 in Calcutta (proper). In these 114 cases studied, the average re-issue value was found to be 86 per cent of the withdrawn value. Applying this for the sixteen years ending in 1975-76, it may be seen that the average annual issue of

Fresh bills should have been 86 per cent of Rs. 1.12 crores of withdrawn bills or Rs. 0.96 crores. But the average issue for the said period is actually Rs. 0.60 crores. The annual gap here is, therefore, Rs. 0.36 crores. The same for Tollygunje is estimated as Rs. 0.03 crores to give the total for Calcutta Corporation as Rs. 0.39 crores. This is what may be called loss of potential revenue by continued uncreated demand in Fresh bills. It may be added at the end, however, that both these estimates are conclusively indicative of the actual situation persisting for a long time now though actual estimates, year by year, may give different figures.

LOPSIDED CONTROL

A history of thirty years of sub-optimal property tax demand creation proves shambles of local public administration. The story of lackadaisical property tax assessment remained confined within the four-walls of the Assessment Department. Otherwise, when crores of potential revenue of Supplementary demand were laying hidden in the Order Sheets and Objection Registers the Commissioner's Budget Estimates report of Calcutta Corporation could not make provisions of average annual Supplementary demand as Rs. 0.63 crores in the sixteen-year period from 1960-61 to 1975-76 with average annual created demand as Rs. 0.49 crores. But the assessing officials could never thrive in watertight compartment with unfettered administrative linkages hierarchically up from Deputy Commissioner (Revenue), Commissioner, Mayor (or Administrator at times of supersession) and finally Secretary, Department of Local Government and Urban Development. In fact, all local bodies are supposed to send to the State Government in printed proforma an annual statement of income and expenditure—a practice enforced for all but Calcutta Corporation. Above all, out of dire financial hardship Calcutta Corporation has been asking for more revenue from the state by way of grants, shared-revenue and exclusive jurisdiction of some taxes without diving into its own gold mine because there was never a clear internal research-based report about the true form and dimension of this perennial uncreated demand at hand of the top management from the civic body to the state headquarters. The aimless re-assessment and colossal loss of potential property tax revenue by continued lag in property tax administration in Calcutta Corporation could not persist for decades had there been surveillance from superior administrators based on one's own staff report from internal research. It cannot be that decisions were not there during these thirty years from 1951 to change things; but it can be that quality of decisions was not gliding up; and how can they do so unless decision-makers have organisational men to work as staff assistants to place before them research-

based papers showing alternative consequences of possible courses of action?

OTHER SYSTEMS

Bombay and Delhi follow a completely different system of property tax administration. The base of the tax is, of course, the same, *i.e.*, annual rental value. Rating in Bombay is basically flat, and not progressive as in Calcutta, under the benefit principle of (local) taxation as against the principle of ability to pay. Both levy single-share rate demand bill in owner's name. Bombay sends two bills in the year; Delhi, only one. Rate-payers can, however, pay by instalments if they so prefer and with approval of authorities at the time of payment. A highly significant matter is that a rate bill incorporates the past dues of arrears as well as the current demand. And still more important element is the comprehensive register of demand and collection. In Delhi it records serially for all rate-payers four yearly figures of arrear, demand and collection. A model of the register can be found in the Punjab Municipal Act 1911. The pivot of administration in Bombay is tight business-minded programme performed under superior's chase-up in completing year's job yearly. Another feature of fundamental difference having substantial impact on the volume of work involved is that there is nothing like periodic general revision of all assessment premises. Instead, they practise the system of annual revaluation of selected properties, like the cases of intermediate valuation in Calcutta, which have undergone some physical re-construction or have had change of rent.

Bombay follows the practice of completion of all formalities of new assessment cases on fiscal year basis and billing of both categories of assessment premises for yearly demand according to one time schedule. The assessment staff of Bombay will complete field work regarding revaluation of the 'due' premises by 15th October for effectuation in the following fiscal year. The receipt of objections to new assessments will be completed by 15th November; hearing settlement of the revised annual value will be achieved by 15th February. Re-assessment is affected by demand bills for the following fiscal year in the new assessed value fixed by the Corporation. Year's first bi-annual bills will be sent by the IBM centre to the respective ward offices by the 5th April, by 10th no less than 2/3rd bills are despatched and by 15th all bills for the first half of the year for all assessment units, including the ones which have undergone revised assessment for the current fiscal year, will be sent to the owners. The result is that all potential demand of Bombay Corporation's property tax is created annually on a regular basis. One may, however, lodge a legal suit after payment of the new demand.

There remain, of course, a few unresolved assessment disputes with the Corporation at the beginning of the fiscal year. These relate to complicated and big institutional assessments. In 1976-77 Bombay had a total of 2,21,352 units of assessment. The number of annual re-assessment cases was 15,788 or 7.1 per cent of total. It had 888 cases of pending objection as of 1st April, 1977. The system followed by the Delhi Municipal Corporation is very much akin to that in Bombay. Another common administrative device connected with review of re-valuation is the practice of sending rent-cum-building data return form, appended with demand bill, to all rate-payers for self-filling and despatch to the civic headquarters. The send-back of this return form, with data filled in is taken as an important instrument about the assessee's points of dispute with Corporation's re-assessment at the time of its review. In fine, this seriousness in administration has earned both fear and respect for the civic officials and are revealing in the business talks between the assessee and the assessment officer.

The whole gamut of assessment function in Bombay and Delhi is run on principles of diffusion of power as well as surveillance of superiors. The nineteen ward offices in Greater Bombay are run as mini Corporations each headed by a Ward Officer. An Assistant Assessor and Collector under the Ward in-charge takes full care of property tax administration in that Ward. Three Deputy Assessor and Collectors for City Proper, Eastern Zone and Western Zone areas pay routine visits to their respective Zonal Wards supervise the work. The nature of decentralisation of power up to the headquarter level can be understood by looking at the graded review system. The Assessor and Collector in Bombay reviews re-assessment of properties valuing more than Rs. 1.50 lakhs. The Deputy Assessor and Collector is the hearing officer for properties with value lying between Rs. 70,001 and Rs. 1,50,000. The Assistant Assessor and Collector is for review of properties upto Rs. 70,000. The top management of Delhi Municipal Corporation has one Assessor and Collector, one joint, six Deputy and 33 Assistant Assessor and Collectors. Additionally, there is one Tax Recovery Collector of the status of deputy.

QUO VADIS?

Calcutta's property taxation with six-yearly GR and annual Inter has produced the net result of perennial incomplete administration for some thirty years now. Bombay and Delhi with annual revision of assessment of selected premises have achieved relatively higher administrative efficiency in completing year's work yearly.

A big change in the assessment administration of Calcutta has now been brought from the first quarter of 1978-79. An internal re-organisation has done away with the previous functional system of adminis-

tration. Instead, seventeen assessment divisions have been framed where sixteen territorial divisions deal with allotted wards in respect of total assessment function from valuation to writing of Supplementary and Fresh bills. The seventeenth division deals with assessment matters related to civil courts and Calcutta Improvement Trust. The preparation of PD bills remains centralised in the mechanical data processing centre running since 1974-75. A new cell has been created to write arrear Supplementary bills from past completed Order Sheets. The system of hearing of objections to valuation by Special Officers remains the same and away from the four-walls of the new assessment divisions.

The jurisdictions of these sixteen divisions do not tally with those of the Collection Department's fourteen Divisions. Hence the dual organisation of assessment and collection remains for Calcutta (proper) with 91 ward along with the system of combined assessment and collection in Tollygunje division with 9 wards as in the past. The replacement of the functional organisation of assessment by territorial jurisdiction does, therefore, remain incomplete in an important way by retention of the mechanism for hearing of objections by Special Officers. The data recording system with old registers does also remain unaltered.

The objectives behind the re-organisation are now to be compared and contrasted with derived results. The revenue potential of re-valuation by GR and Inter should be fully utilised by creating demand bills so that discriminating injustice from incomplete assessment is wiped out along with putting in revenue to the coffers of the city government. Whether the reorganisation has stemmed the decades old rot will remain as the moot question until it is established by internal research papers that year's work is being completed yearly in respect of Inter's of all divisions and GR's in concerned divisions since 1st April, 1978. □

Abolition of Motor Vehicle Tax: Case Study of Hyderabad Municipal Corporation

P. ARJUN RAO

AMONG SEVERAL dimensions, of local government, funding and finances of local bodies form most interesting studies. It is equally interesting to study the state-local relations from the perspective of local finances. It is a well-known fact that the financial position of local bodies of developing countries like India is not satisfactory. The enabling government attributes several factors to this sad state of affairs. Among them the important factors are financial mismanagement, inefficient bureaucracy and corruption. The reasons advanced by the higher level government may not totally be ruled out. Yet to certain extent the enabling government's expropriative attitude also contributes to the bad financial position of the local bodies. Some taxes levied by the local bodies are withdrawn by the State Government on account of political pressures and also popular demand. And some other taxes are expropriated by the enabling government for itself to facilitate its financial position. Thus the tax structure of the local bodies is gradually narrowed down to a level where the local bodies are made subservient to the higher level government. Here is an issue examined in order to explain the expropriative tendency of the State Government with regard to abolition of motor vehicle tax from the tax-purview of the local bodies in Andhra Pradesh with particular reference to the Hyderabad Municipal Corporation. The study examines the process of decision-making between the State Government of Andhra Pradesh and the Hyderabad Municipal Corporation.

The Municipal Corporation of Hyderabad is empowered to levy the following taxes:¹

1. Taxes on land and buildings;
2. Octroi;

¹The Hyderabad Municipal Corporation Act, 1955, Section 197 (1, 2, 3).

3. Taxes on vehicles;
4. Taxes on animals and goats;
5. Taxes on profession, trade, calling and employment;
6. Taxes on advertisements, other than advertisements published in newspapers;
7. A tax on transfer of immovable property; and
8. Taxes on entertainment, etc.

The list of taxes as enumerated in the taxation chapter of Hyderabad Municipal Corporation Act 1955 might appear long but the study of the history of financial administration of Municipal Corporation of Hyderabad with regard to taxes is interesting and something different. The major source of finance of the Municipal Corporation is the property tax. The next major tax was octroi which was abolished from April 1, 1965 and the State Government paid the compensation in lieu of loss of octroi. The compensation in lieu of loss of octroi was not proportionate to the income derived by the Corporation. The toll tax was also abolished from April 1, 1961 and compensation was being paid to the Municipal Corporation. The entertainment tax is collected by the State Government and 95 per cent of the proceeds from the tax is being paid to the Corporation and 5 per cent is taken by the State Government towards its collection charges. Another important source of finance was vehicle tax. It was also abolished in the year 1963. The Corporation, thus, is left with the property tax as a major source of income and a few other taxes the proceeds of which is meagre compared to the responsibilities to be performed by the Municipal Corporation of Hyderabad. That has reduced the Corporation to a mere agency depending on the State Government to discharge its functions. The compensation in lieu of loss of taxes abolished were not in proportion to the income derived from the said taxes. It might be pertinent, here, to state that the State Government gave the impression to have understood the financial difficulties of the Corporation but it is perplexing to note that it started taking decisions of either abolishing the taxes or appropriating them.

The State Government on one or the other plea abolished vehicle tax whose income was also progressively increasing every year. The study of abolition of vehicle tax gives an insight as to how the State Government did not take the city civic government seriously with regard to its financial problems; instead of assisting a partner in representative democracy it usurped its resources.

REASONS ADVANCED FOR ABOLITION OF MOTOR VEHICLE TAX

A proposal emanated from the Home Department (Transport),

Government of Andhra Pradesh to unify and combine the various taxes both direct and indirect including the tax both on passengers and goods that were levied on Motor Vehicles in the State. There existed the disparity in levying tax in Telangana and Andhra regions. The State Government decided to bring the uniformity in Motor Vehicle tax structure prevalent in two regions of Andhra Pradesh, *i.e.*, Andhra and Telangana. The income that would accrue after the uniform law was implemented was 20 to 40 lakhs from the Telangana region and the total revenue from this tax in the state would rise from 235 lakhs to 275 lakhs per annum.² The second and the important reason was to augment the revenues of the state for implementation of various developmental schemes in the state under the five year plans.

The State Government in the year 1959, enacted the Andhra Pradesh Motor Vehicle (Taxation of Passengers and Goods Amendment Act) Act XXI of 1950 by enhancing the rates four-fold in respect of stage carriages, double in respect of vehicles carrying goods. It lacked the previous sanction³ of the President of India. The State Government proposed the Bill for the consent of the President of India. The Government of India requested the State Government to incorporate two aspects in the proposed Bill as stated below:

1. To make the A.P.M. Act 1952 as subsequently amended operative up to and inclusive of March 31, 1962 pending comprehensive legislation for consolidation of taxes on Motor Vehicles; and
2. to exempt minerals and mineral ores transported by public carrier vehicles from the liability of the tax.

THE DECISION-MAKING PROCESS AT THE STATE GOVERNMENT

While making explorations to take a decision for enactment of uniform and consolidated taxation structure of Motor Vehicle Tax, it was also proposed by the Home Department to work out to give compensation to local bodies in lieu of loss of Motor Vehicle Tax. It was estimated that with the enhancement of Motor Vehicle Tax under the Uniform Taxation Structure Act the income that would accrue to the State would be Rs. 1 crore, *viz.*, Rs. 40 lakhs from Telangana area by bringing the Motor Vehicle Tax on par with the rates of Andhra area and Rs. 72 lakhs on stage carriages (Buses) in Telangana which were hitherto enjoying exemption from payment of taxes. Further the additional revenue that would accrue on account of the said increase might also meet the require-

²Vide State Government Records.

³Article 304 (b), the Constitution of India.

ment to pay compensation to local bodies.⁴ In the process of decision-making to abolish the Motor Vehicle Tax, it was also proposed to abolish the octroi bringing an analogy of vehicle tax with that of octroi. But it was considered to be a different tax altogether and the same was later agreed by the State Government.⁵ It was also suggested that the Health, Housing and Municipal Administration Department of the Secretariat of the State Government also be consulted as the Motor Vehicle Tax was being levied by the municipalities in Telangana and the Municipal Corporation of Hyderabad. The proposal was given concurrence by the Minister for Labour and Transport and the Chief Minister.⁶

SUBDUED REACTION OF THE MUNICIPAL CORPORATION OF HYDERABAD

Accordingly, the action was initiated by the Municipal Administration Department of the Secretariat and communicated to the Commissioner⁷ that a decision has been taken by the State Government to abolish all taxes and fees levied by the Corporation and the municipalities on the Motor Vehicles. And it was also decided to provide for the payment of compensation in lieu of the loss of such income. The commissioner was requested by the Municipal Administration Department of the Secretariat to send the suitable draft amendments to the Hyderabad Municipal Corporation Act, 1955 to abolish the Motor Vehicle Tax so as to consolidate Motor Vehicles Taxation and the Bill which was scheduled to be introduced in the ensuing session⁸ of the State Legislative Assembly. The Commissioner, Municipal Corporation of Hyderabad, accordingly submitted⁹ the draft amendments to the Hyderabad Municipal Corporations Act 1955 for deletion of the provisions governing the levy of vehicle tax and for inclusion of a separate provision in the said Act, regulating the payment of compensation to the Corporation to meet the loss of income from vehicle tax. The Commissioner, while transmitting the amendments to the Hyderabad Municipal Corporations Act, 1955 represented to the State Government with regard to compensation, as following:

1. the State Government shall pay annually such compensation

⁴Home (Transport-II) Dept., A comprehensive note made in Municipal Administration Department, Secretariat, G.O.A.P., Para. 200.

⁵*Vide* official records, Government of Andhra Pradesh.

⁶*Vide* a comprehensive note prepared in Municipal Administration Department of the Secretariat, G.O.A.P., Para 249 dated 24-5-62 and 25-5-62.

⁷DO No. 1707/KI/62-1, HH and MA (KI), dt. 21-6-62.

⁸Monsoon session of the State Legislative Assembly of G.O.A.P. The time given to the Corporation was very short.

⁹Lr. No. 4033/62-GI, Municipal Corporation of Hyd., Dt. 23-5-62.

to the Municipal Corporation of Hyderabad in lieu of the loss of income on account of abolition of loss on motor vehicles, as may be equal to the income derived from Motor Vehicle Tax in the year immediately preceding abolition of the tax; and

2. the annual compensation shall be revised every third year.

The income from the Motor Vehicle Tax was steadily increasing every year.¹⁰ Secondly on account of Hyderabad City's strategic location, industrial expansion, increase in volume of trade and commerce and expansion occurring on account of developmental programmes taken up under every five year plan, the income might rise from the proceeds of Motor Vehicle Tax. Accordingly the Commissioner suggested to the State Government to pay the compensation equal to the income derived immediately preceding year of abolition of the tax, and also the compensation might be revised every third year. This would, certainly, help the Municipal Corporation of Hyderabad to gain relief from financial strains. It may be stated running the risk of repetition that State Government did not even spare a minor tax like Motor Vehicle Tax to the Municipal Corporation by advancing two reasons:

- (a) to frame a uniform tax structure for the 2 regions of Andhra and Telangana, thus raising $2\frac{1}{2}$ times to the then existing Motor Vehicle Tax to bring on par with the Motor Vehicle Tax in Andhra Pradesh; and
- (b) to augment the revenues of the state for implementation of various development schemes in the state under 5 year plan.

The pleas of the State Government to expropriate the Motor Vehicle Tax were not based on rational considerations for the financial position of the local bodies was also not satisfactory. The scope and jurisdiction of taxation for the State Government was far wider than the City Government and to augment the finances of the State Government for developmental activities, it could have exploited many other resources at its disposal rather than expropriating the Motor Vehicle Tax from the tax spectrum of the Municipal Corporation. The suggestions and amendments on Motor Vehicle Tax as desired by the State Government were communicated by the Commissioner to the State Government in the month of June, 1962. But a lull prevailed in this matter till November, 1962. The Corporation was in a predicament whether to treat the Motor Vehicle Tax as being abolished or any change in the thinking

¹⁰(a) Letter No. 275/4033/62-D1/GT by the Commissioner, M.C.H. addressed to the Joint Secretary to Government H.H. and M.A., Dept. dt. 26-12-62,

(b) Appendix III.

of the State leadership was there with regard to its decision of abolition. The Corporation had also to keep in view its budget and other necessary arrangements to be made in case of its abolition. The predicament on account of the silence maintained by the State Government on the issue might have made the Assessor and Collector of the Corporation write¹¹ to the Secretary to Government, Municipal Administration Department requesting to know whether the amendments to the Motor Vehicle Tax were being considered. Meanwhile the Home of the Transport-II) Department conveyed the Municipal Administration Department, Secretariat that the Motor Vehicle Tax Bill might be introduced either on 10th or 12th of September 1962. Again the Commissioner had to write¹² to the Joint Secretary to the Municipal Administration Department requesting to know whether the Motor Vehicle Tax levied by the Corporation might be abolished from the next financial year, *i.e.*, 1964 and this information was essential to make necessary arrangements to stop collecting the Tax. The Municipal Administration Department of the State Government informed¹³ the Commissioner as follows:

1. the Andhra Pradesh Consolidated Motor Vehicle Taxation Bill which envisaged the abolition of levy of all indirect taxes on Motor Vehicles by the Municipalities and Municipal Corporation would come into force from April 1, 1963; and
2. therefore the levy and collection of taxes on Motor Vehicles by the Municipal Corporation of Hyderabad would have to be stopped from April 1, 1963 onwards whether or not the Hyderabad Municipal Corporation Act, 1955, had been amended by that time.¹⁴

ARBITRARY DECISION BY THE STATE GOVERNMENT

The City Government was simply taken for granted to agree to the idea of abolition of Motor Vehicle Tax. The opinion given by the top bureaucracy to the political executive of the state on the issue was quite arbitrary. The stand of the State Government was made known in their communication to the Commissioner stating whether or not the Hyderabad Municipal Corporation Act, 1955 was amended by that time, it should be treated as abolished.¹⁵ In other words, it amounted to mean that the State Government would proceed with the matter of abolition of the tax

¹¹The Assessor and Collector's Letter No. 275/4033/62/DI/62 dt. 22-11-62.

¹²Do Note Home (445/Tr. II/61-70, dt. 9-12-62.

¹³The Commissioner, M.C.H. No. 275/4033/62-GI/D. dt. 29-1-63.

¹⁴The Commissioner, M.C.H. 275/4033/62-GI/D. dt. 29-1-63.

¹⁵(a) DO No. 1707/KI/62-14 HH & MA (KI) Dept. of the Secretariate, D.O.A.P. dt. 2.2.63.

(b) UO Note.

even if Bill was not introduced in the Monsoon session of the Legislative Assembly in 1962. Thus the Municipal Administration Department responded to the Commissioner in definite terms that the Motor Vehicle Tax would be abolished from April 1, 1963 after the Home Department conveyed¹⁶ to it that the Act might come into force by April 1, 1963 and Vehicle Tax should not be collected from that date.

EFFORTS TO LINK MOTOR VEHICLE TAX WITH OCTROI

A persistent effort was made by the Home Department of the Secretariat to link the issue of abolition of octroi with the abolition of Motor Vehicle Tax from the beginning to the end when the note was circulated to the Council of Ministers meeting. The Secretary Municipal Administration and also the Minister for Municipal Administration opined that the octroi was levied on the goods transported and exported to and from the city and it was collected from the owner of the goods but the Motor Vehicle Tax was levied on the owner of the vehicle. So the issue of the abolition of octroi was abandoned and the abolition of the Motor Vehicle Tax was considered by the Council of Ministers and the draft of Motor Vehicle Taxation was approved.¹⁷ The Council of Ministers' Resolution stated that the octroi was different from wheel tax and to abolish the octroi was not justified. It was also decided¹⁸ to examine whether the uniform level of tax under the Integrated Motor Vehicle Taxation Bill might not be fixed at Andhra level without any serious loss of the increased revenue expected by applying the maximum rates enumerated in the Bill.

COMPENSATION IN LIEU OF LOSS OF MOTOR VEHICLE TAX

Accordingly the Government abolished¹⁹ the levy of taxes on Motor Vehicles by the Municipal Corporation of Hyderabad and to pay some compensation to the Corporation in lieu of loss of income from the above source. With the abolition of Motor Vehicle Tax the issue left over was about the compensation in lieu of loss of the tax to the Municipal Corporation of Hyderabad. The Commissioner while transmitting the amendments to the Hyderabad Municipal Corporation Act 1955, pertaining to abolition of the tax requested the State Government to incorporate the matter in the proposed Bill relating to compensation equipalant to the income derived immediately preceding year of the

¹⁶Uo Note 1707/K/62-17, HH & MA(K) Dept. Secretariat, G.O.A.P. dt. 27.3.63.

¹⁷UO Note No. 1192/Tr. II Home (Transport II) Secretariat, G.O.A.P. dt. 29-3-63.

¹⁸Resolution No. 99/62, 103 meeting of the Council of Ministers dt. 27-9-63.

¹⁹(a) Council of Ministers Meeting, Govt. of Andhara Pradesh dt. 27-9-1963.

(b) G.O.Ms No. 425, Municipal Administration Department, Secretariate, Government, dt. 20-3-1963

abolition of the tax subject to revision every third year.²⁰ The Health, Housing and Municipal Administration Department of the State Government desired²¹ to know the income derived from Motor Vehicle Tax by the Corporation from 1959 to 1962. Further the commissioner wanted the State Government to know that Vehicle Tax on Motor Vehicles was the only indirect Tax that was being levied by the Corporation. The Commissioner of the Municipal Corporation stated²² that there were two aspects in defining the direct and indirect levy and collection of tax on Motor Vehicles.

1. the tax on private motor cars owned and used for personal use by the owners;
2. in case where motor cars were used as taxies or those run by Road Transport Corporation or any other private agencies, tax would be deemed as indirect tax. It was stated that the income derived by the Corporation, during the last 3 years (Hyderabad Division) from Motor Vehicle Tax was given below:

<i>Year</i>	<i>Amount Collected</i>
1959-1960	Rs. 2,31,231.00
1960-1961	Rs. 2,52,239.10
1961-1962	Rs. 2,68,980.40
1962-1963	Rs. 2,77,377.00

- (i) amount to be received from State Road Transport Corporation for R.T.C. Vehicles for 1962-63 would be about Rs. 50,000.
- (ii) The approximate amount which the Corporation might obtain during the rest of the financial year, other than the amount from R.T.C. would be about Rs. 50,000. Thus the Commissioner indicated the total amount that would be realised from this tax was about Rs. 1,00,000 during the year 1962-63 apart from Rs. 2,77,377.

When the matter of compensation in lieu of loss of Motor Vehicle Tax levied by the Municipal Corporation of Hyderabad was referred to the Finance Department by the Health, Housing and Municipal Administration of the Secretariat, the former opined²³ that the com-

²⁰ The Commissioner, M.C.H. Letter No. 4033/62-Gl. dt. 23.6.1962.

²¹ DO Lr. No. 1707/K1/62-II MA(K1) Dept. Secretariate, dt. 13-2-1962.

²² The Commissioner, M.C.H. Lr. No. 275/4033/62-D1/CT, dt. 26-12-1962.

²³ UO Note C. No. 942/63, Fin. Dept. as quoted by the HH & MA(K1) Dept. of Secretariate, G.O.A.P, in their note para 117 of the F. 1707/K1/62, dt. 19-5-63.

pensation might be worked out at the rate of 30 paise per head of population. The Superintendent of Census Operation of Andhra Pradesh was requested by Municipal Administration wing of the Secretariat to furnish the population of the twin cities of Hyderabad and Secunderabad which was given as follows:

1. Hyderabad Division of M.C.H.	9,31,082
2. Secunderabad Division of M.C.H.	1,87,471
TOTAL	11,18,553

The Department of Municipal Administration, Secretariat, pointed out that there was no necessity to incorporate the clause of compensation proposed to be paid to the Municipal Corporation of Hyderabad in lieu of loss of Motor Vehicle Tax in the amendments as suggested by the Commissioner, Municipal Corporation of Hyderabad. The Commissioner's request State Government was to pay the compensation annually at a sum equal to the income derived from Motor Vehicle Tax in the year immediately preceding the abolition of tax, subject to revision of every third year.

Thus the Housing, Health and Municipal Administration Department observed²⁴ that the compensation to the Corporation might be Rs. 3,77,377 equivalent to the income derived by Municipal Corporation of Hyderabad during the year 1962-63. But Housing, Health and Municipal Administration Department, observed²⁵ that while abolishing the Toll Tax in the year 1961 the three years average income was taken into consideration and if the same principle was accepted in this case also the compensation to the Municipal Corporation of Hyderabad might be Rs. 2,99,532. This figure was in contrast to the compensation arrived at by the Financial Department of the Secretariat, which was Rs. 3,75,701, when the population was taken as 12,52,337 as per the provisional census figures of 1961. But as per the population of Twin Cities of Hyderabad and Secunderabad at the rate of 30 Paise per head of population, the compensation might be approximately Rs. 3,35,566. Thus the difference between the Financial Department Municipal Administration and the Corporation was perhaps running in thousands but the approximate amount arrived at by the Financial Department and compensation proposed by the Commissioner, Municipal Corporation of Hyderabad was not that large. The Administrative

²⁴Telephone Message No. 1707/KI/62-12 MA D/21-1-63. Lr. No. 131/62 HB Supdt. of Census Operation, Hyd. Ministry of Home Affairs, GOI C. No. 3164/63 (KI) MA D/7-10-63.

²⁵C. No. 3164/63 (KI) MA D/7-10-63.

leadership of the Housing Health and Municipal Administration Department stated that the compensation of Rs. 3,35,566 as proposed by the Financial Department might be agreed to²⁶ as the difference between the Commissioner's estimate and the Government's was very small. The Financial Department stated that the proposed compensation to the Municipal Corporation of Hyderabad in lieu of loss of Motor Vehicle Tax was already included in the Budget estimates and voted in the Supplementary Budget Grant of 1963-64 and hence it might be paid to the Corporation. After the concurrence of the Financial Adviser of Housing, Health and Municipal Administration and also the Financial Department the proposed compensation of Rs. 3,35,566 was sent to the Minister for Municipal Administration and also the Minister for Finance, Government of Andhra Pradesh. They agreed²⁷ with the entire proposals and an Executives instruction²⁸ was issued on the issue.

CONCLUSIONS

The foregoing study reveals several interesting factors from the point of view of State-local relations as regards the local finances. It is a well-known fact that local bodies especially urban local bodies suffer from financial difficulties. The reasons advanced by the government as stated earlier are financial mismanagement, inefficient bureaucracy and corruption.

But it may not be perhaps far from truth if stated that the State Governments do no better. It is worthwhile to know that the proceeds from the Motor Vehicle Tax was steadily increasing every year. And such a tax was expropriated leaving the Hyderabad Municipal Corporation looking upon the State Government for financial assistance. The reason to take away the Motor Vehicle Tax was to pool the resources for the state developmental schemes. It is well-known that the State Government's area of tax spectrum is wider than the local body. It could have explored and exploited other avenues for finances for developmental functions rather than to expropriate a tax from the local tax arena. The abolition of Motor Vehicle Tax was an arbitrary decision of the State Government. This amply demonstrates that the public policy of the State Government does not take into cognizance the rational considerations and genuine financial needs of the local bodies but they are brushed aside. It is pertinent to point out that the Hyderabad Municipal Corporation has only one major source of finance, *i.e.*, the property tax.

²⁶C. No. 3164/63 (K1) MA Dt. 7-10-1963.

²⁷Note for circulation HH & MA (K2) 25-1-64 and agreed by the Minister for Municipal Admn. Dept. Minister for Fin. Dept. of G.O.A.P. on 3-2-64 and 15-2-64.

²⁸G.O.Ms No, 208 HH & MA(K2) Dept. Govt. of A.P. dt. 25-2-64.

The octroi was abolished and a meagre compensation was being paid. Entertainment tax was limited to the tune of 95 per cent and 5 per cent was taken by State Government towards its collection charges. It is also important to point out that the personnel engaged in sales tax administration discharge the functions of collection of entertainment tax as well. It might not be an additional burden and hence the 5 per cent of revenue from this source to the State finances is not justified. And the axe fell on Motor Vehicle Tax. Taxes are either withdrawn or expropriated by the enabling government for the reasons of political pressures, popular demand and its own vested interest. This is not an uncommon experience in India. It is a clear case of a system influencing the subsystem and making the local bodies to heavily depend on the State Government and it leaves one to think how far the autonomous bodies like the Hyderabad Municipal Corporation are autonomous. It becomes imperative to take some measures to allow the local bodies function as the partners in democracy.

It is desirable to see that the provisions are incorporated in the Constitution of India enabling the local bodies to share powers, function and finances along with the States and the Union of India. It may be called a 'Local List'. Again a machinery like Inter-Governmental Commission be set up to examine the issue cropping up between the State Government and the local bodies. Such a commission should be a statutory body and members be appointed by the State Government. It may be consisted of the representatives of the State Government, Urban Development Authority and the Municipal Corporation and the decision of the Commission shall be made mandatory. The experience of constitutionalising the relations between the enabling government and the enabled and also the functioning of Inter-Governmental Commission would go a long way in strengthening the Municipal democracy to function effectively and meaningfully. □

Organisational Structure of a Water Authority: The Madras Metropolitan Water Supply and Sewerage Board

H.B.N. SHETTY

SCIENCE HAS proved beyond doubt that protected water supply and removal of waste water are essential requisites for a cleaner environment. With increasing population and consequent water demand on the one hand but with fast depletion of the available water resources coupled with the faster industrialisation resulting in the deteriorating water quality of even the available resource on the other, there is a greater awareness for a concentrated emphasis on these two related fields of water supply and waste water removal. Traditionally this work has been assigned to the local bodies concerned. Constitution of separate water authorities has, however, been recognised, of late, as one of necessity in this context and this practice is a break from the conventional linking up of this profession with the general field of civil engineering. Separate departments to deal with this field have been constituted in almost all the states in the country and in fact also exclusively for certain metropolitan cities. Madras has not lagged behind in adopting this new idea. A statutory authority to be exclusively incharge of these two services in Madras Metropolitan Area has been constituted and it is proposed to make a critical analysis of the formation and the functioning of this organisation in this article.

BACKGROUND INFORMATION

The Area

Madras is the capital city of Tamil Nadu state and is located at the hub of an extensive network of land, sea, and air transportation facilities serving south India. Madras is the fourth largest city in India and its literacy rate is fairly high at about 40 per cent with extensive cultural and educational facilities. The city is now covered by a peripheral belt of urban development of equal extent. A larger extent styled as Madras Metropolitan Area (MMA) has been identified for planned improve-

ments of developmental activities in various fields. Salient features of Madras city, Madras Urban Agglomeration (MUA) and Madras Metropolitan Area (MMA) are given below:

AREA AND POPULATION OF MMA

<i>Area</i>	<i>Extent in sq. km.</i>	<i>1971 Census (millions)</i>	<i>1980 Estimated population (millions)</i>
City of Madras	172	2.58	3.55
Madras Urban Agglomeration	531	3.17	4.25
Madras Metropolitan Area	1167	3.48	4.70

The commercial activities in the Madras urban area are predominantly of service oriented types. The major industrial activities are centred around the production of textiles, electrical equipments, machinery and motor vehicles. The MMA consists of Madras city, four municipalities, four municipal townships and twenty-two panchayats.

The Status of Water Supply

Madras city is a peculiar case where the authorities have been depending upon a single source for over a century for this essential service of water supply. The source which is from surface storage is fed by a river basin depending mostly upon the north-east monsoon which is active only for two to three months in a year. The dependable supply for the present population in years of normal rain fall is sufficient to ensure a per capita supply of only 70 litres per day which is far low from any accepted standard. There are no nearby sources for augmentation and with the increasing population the need for a comprehensive planning and a heavy investment on augmenting the source is obvious. The status of water supply in MMA outside the city is still worse. The urban and the semi-urban areas have either been provided with or are being planned for a piped water supply system whereas the rural areas are just equipped with a public distribution system consisting of a well with or without a few street taps. Major industries in the periphery of the city meet the water supply requirements from a ground water aquifer of limited capacity.

The Status of Sewerage

Madras city is benefited with a full fledged sewerage system covering a major portion of the area. Due to inadequacy of the system especially

in the collection and transmission fields, overflow of the city sewerage into the city's waterways has become a hazard. The system has been regionalised and full scale biological units have just been provided for treatment. These are, however, just in the process of full utilisation. Meanwhile grass farming used as a method of treatment with effluent draining into the water course is adopted which incidentally is having sufficient revenue generation for self supporting. Pending implementation of improvement schemes now in various stages, letting of raw sewerage into the sea continues resulting in the beach pollution as well. There is no sewerage system outside the city in MMA.

Institutional Aspects

Madras city is under the administrative control of the Madras Corporation which has larger executive powers vested than the other local bodies. The Madras Corporation and the Municipalities are under the administrative control of the Department of Rural Development and Local Administration of the State Government (RDLA).

Three separate State Government departments were in control of water supply and sewerage activities in the MMA through institutions or departments which carry out the actual operations. Some of them are organised in a functional manner and some on a geographical basis, so the responsibilities inevitably overlap.

The majority of the organisations connected with water supply and sewerage in the MMA come under the RDLA department of the Government of Tamil Nadu. They are:

- (i) The Madras Municipal Corporation (MMC) which had the responsibility for construction, design, operation and maintenance of such systems in the Madras city area.
- (ii) The Tamil Nadu Water Supply and Drainage (TWAD) Board which is responsible for design and construction of water and sewerage systems throughout the state. In practice, its role in the Madras city area was restricted to technical approval of the MMC's designs.
- (iii) The Madras Metropolitan Development Authority (MMDA) which is the planning authority for the area and acts as an agency for monitoring development activities in various sectors in MMA.
- (iv) Municipal Councils, Townships and Village and Town Panchayats in the MMA, which operate and maintain water supply and sewerage systems (if any) in their area.

The Public Works Department of the Government of Tamil Nadu has many branches of which two deal with the MMA's water supply

and sewerage services. They are:

- (i) The irrigation branch of the Public Works Department (PWD) which operates and maintains the Poondi-Cholavaram-Redhills system which provides the greater part of the Madras water supply.
- (ii) The ground water branch of the PWD which investigates new sources of water below ground by conducting hydrological surveys. It also operates well fields in and just outside the MMA at Minjur, Panjetti and Tamaraipakkam, from where water is supplied to industries in the MMA at fairly low rates.

THE FUTURE REQUIREMENTS

The MMA has a population of over four millions, which is expected to increase to seven millions by end of the century. The water supply is inadequate even for the present needs and will have to be augmented very considerably in the coming years to meet the increase in population by developing new sources of supply, transmission systems and distribution networks, together with all the ancillary features which a balanced system requires. Similarly, the sewerage systems will also have to be greatly enlarged. The development of this part of the metropolitan infrastructure should be a primary forerunner to the successful achievement of the planned development of Madras in accordance with the Metropolitan Master Plan.

There will be a very substantial financial investment to provide the required water and sewerage facilities and this investment will demand large manpower, materials and management resources to ensure that it is effectively and expeditiously applied.

The organisation or organisations which will be able to grapple with these massive and arduous tasks will need excellent management and a strongly coordinated internal structure. They will have to meet the objectives for the sector established by the planning authority, to provide the required per capita quantity of potable water to every citizen. Moreover, they will have to do this at an economic price, balancing capital and revenue expenditure with income. They will also have to demonstrate financial and managerial viability to the satisfaction of international and local lending agencies.

THE NEW UNDERTAKING—FACTORS INFLUENCING ROLE

The need for rationalisation of the water and sewerage services in the MMA by constituting a separate authority is apparent but identification and elaboration of its duties and responsibilities would depend upon functional, geographical and financial constraints.

Functional Divisions

It would be technically feasible for two separate organisations to look after water and sewerage systems but, since the quantity of water supplied directly determines the quantity of sewerage collected, a more balanced overall design of water and sewerage systems can be expected to result from them being operated by a common agency. Within a particular geographical area, the same agency should be responsible for water and sewerage.

The main activities to be considered are as follows:

- directive and policy functions, including top management, long term planning, financial management,
- design and construction of new facilities,
- operation and maintenance of systems.

It is a widespread practice to give to one utility the overall responsibility for design, construction, operation and maintenance of systems. This is the modern management practice in water and sewerage, electricity, railways and telephones, although complex or extensive design work is sometimes sub-contracted to specialist consultants.

Geographical Divisions

The MMA includes two areas which have different characteristics at present:

- the city, which is largely developed has extensive water and sewerage systems,
- the non-city area, which includes some towns, but is mainly rural and has very limited sewerage systems.

The city's populations is expected to continue to grow. The area outside the city will become more developed as its population grows. In fact, extent of urbanisation in the peripheral areas is already catching up with the city, and it is quite possible that the present city boundary will become indistinct due to housing and industrial development and will only represent a line on the map rather than a clear geographical boundary. The future water and sewerage systems should, therefore, be designed to serve the present and future areas of population, irrespective of the present boundaries between the city and its surrounding area. The case for considering both the urban and rural non-city areas as part of the unit is further reinforced by the fact that they lack sufficient water for their requirements, and because none of the organisations within them could be technically self-supporting for water and sewerage facilities.

Financial Aspects

The financial burdens in the future will be severe, and some careful consideration must be given to its effect on the organisation of construction and operation.

The investment will, cover long transmission for augmentation, etc., distribution systems for water and collector systems and treatment plants for sewerage. In each case the debt servicing will amount to a major part of the total annual operating costs. Eventually, the total capital and operating costs of the water and sewerage system have to be borne by the consumer through the tariff. These costs should, therefore, be controlled, so far as they are controllable, by the same body.

THE SET-UP OF THE NEW UNDERTAKING

The Madras Metropolitan Water Supply and Sewerage Board (Metro Water) was constituted by an Act of the State Legislature and came into existence with effect from August 1, 1978. The Board has the following characteristics:

- (i) a managerial autonomy;
- (ii) financial independence with separate accounts and powers to raise revenue and control over facilities;
- (iii) a properly structured organisation with well trained staff.

The Board has taken over all the water supply and sewerage services in Madras city from Madras Corporation and has plans to take over sooner or later the same services outside the city in MMA from the respective local bodies.

The Composition of the Board

The Board consists of the following directors, namely:

- (a) the Secretary to the Government in charge of the department of RDLA, who shall be the Chairman of the Board, *ex-officio*;
- (b) the Secretary to the Government in charge of the Finance Department, *ex-officio*;
- (c) the Member-Secretary of the Madras Metropolitan Development Authority, *ex-officio*;
- (d) the Commissioner, Municipal Corporation of Madras, *ex-officio*;
- (e) six non-official directors nominated by the government, of whom: (i) one shall be a woman; (ii) one shall be a person to represent the interest of the general public; (iii) one shall be a person who is experienced in government or commercial accounts and is qualified as a chartered accountant; (iv) one

shall be an experienced public health or water works engineer; and (v) two shall be persons to represent major industrial or commercial organisations in the MMA;

- (f) three whole time directors appointed by the government, namely: (i) a managing director; (ii) a finance director; (iii) an engineering director.

THE SUB-COMMITTEES OF THE BOARD

The board is empowered to delegate certain matters to sub-committees in order to avoid undue time of the board being spent on specialised topics. Specific decision making powers are delegated to these Sub-committees. The committees constituted under this category are as below:

- (a) Public Relations Committee;
- (b) Tariff Committee;
- (c) Tenders Committee;
- (d) Employment Committee; and
- (e) Management Committee.

Members of these committees are drawn from among the official and non-official directors of the board as well as the heads of offices of the board in the respective branches. As a typical example, Public Relations Committee consists of the Chairman, the Managing Director, the Member-Secretary of MMA, the Commissioner, Corporation of Madras and three non-official directors, namely: (i) a woman, (ii) representing the public; and (iii) representing commerce or industry. It will be seen that this composite representation on the Board of Directors drawn more or less equally from government officials and from the public ensures a more pragmatic and wholesome approach and analysis of the issues taken up for decision. This is all the more so since the non-official directors are drawn to represent various ancillary fields like industry, commerce, accountancy, engineering and the public.

Powers of the Board

In conformity with the statutory recognition of the board to discharge its basic objective of attending to the growing needs of water supply and sewerage services in MMA, the Act provides for certain basic powers for the board. In order to ensure that the interests of the government at large are safeguarded, the powers entrusted to the Board also provide for supervisory control by the government wherever necessary. The salient features are explained below:

- (i) Every building or premises with an annual rental value of more

than Rs. 300 could approach the authority for water supply connection or a sewer connection and the authority is required to arrange for the connection in case the service line is available within a distance of 30 metres. To ensure that the board has sufficient control over the system, the Act provides that the service lines as well as the house sewers, privies and cesspools shall be under the control of the board but shall, however, be altered, repaired and kept in proper order at the expense of the owner of the premises. Powers are also vested with the Board to carry pipe line over a private property.

- (ii) To ensure that quality requirements are met with, all the works are to be carried out only by a plumber licensed by the board. Clear guidelines have been formulated for licensing of plumbers.
- (iii) To ensure that the board is not in heavy arrears of revenue collection from the public towards its dues from the public, the board is empowered to collect the dues as land arrears.
- (iv) The board is empowered to have its own fund;
- (v) The board maintains its own budget but such a budget, as sanctioned by the board, shall also be submitted to the government for approval.
- (vi) The board is empowered to borrow money required for discharging the functions under this Act from either banks, State Government, Central Government or from the public by issue of bonds or debentures, etc. These powers are, however, subject to the regulations and other conditions to be specified by the government.
- (vii) The Board is empowered to execute any project in respect of water works or sewerage if : (a) the cost does not exceed Rs. 75 lakhs in the case of new works, and (b) the cost does not exceed Rs. 100 lakhs in the case of repair works. Prior sanction of the government is required for projects of costs in excess of the above monetary value and also where the board seeks government assistance for implementing these works.
- (viii) The Board is required to have its accounts to be audited by a qualified auditor to be appointed by the Board. Such an appointment will, however, have to be with the approval of the government. In addition, the government is also empowered to appoint at any time an auditor to examine and report upon the accounts of the Board.
- (ix) The Board is empowered to levy water tax and sewerage tax from the public. A ceiling limit expressed in terms of percentage of the annual rental value has, however, been fixed in the Act.

THE ORGANISATION SET-UP

One of the important roles to be played by the board is the engineering function of running the service of water supply and waste water disposal for the utility of the public and also to see that this service is maintained by proper reinforcements suitably at various stages especially since the demand of the service increases with the ever increasing population. Importance of this engineering function has been fully recognised in the organisational set-up which provides for the full-fledged engineering wing and that too with two distinct interchangeable groups: (i) planning, design and construction, and (ii) operation and maintenance.

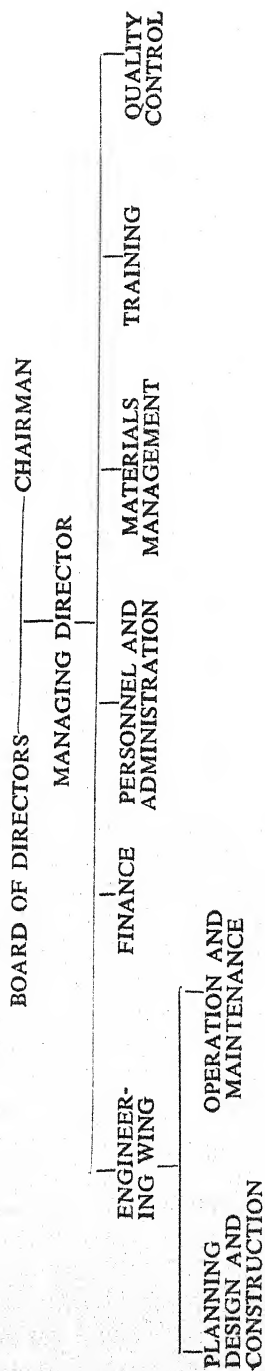
Monitoring of the expenditure on the engineering works as well as a foolproof tax and tariff collection system which is a major source of revenue for the board demands an independent finance organisation which has also been provided for in the Board.

Implementation of a project relating to the provision of water and waste water is distinct from other general engineering projects in the sense that the investment in this field is mostly on materials. Cost analysis of a typical water supply or sewerage project would indicate that the investment on materials would itself amount to around two-thirds the total cost. The need for a separate Materials Department to be solely incharge of procurement and directly reporting to the management has, therefore, been aptly recognised and provided for.

As on date, the Board has a complement of staff consisting of 200 engineers, 10 scientists, 130 administrators and 3700 skilled and unskilled labourers and the management of such a large personnel requires an independent personnel branch which has also been provided for. The stress on the water quality as well as the quality of the receiving waters from the city's waste water need not be overemphasised and a separate quality control wing also finds a place in the organisation. Rapid advancements in this field and the widening gap between the field and office practice in engineering demands in water service training for the staff which has also been provided for. The organisation chart incorporating the above, as it functions today in the board is enclosed.

A critical review on the functioning of the organisational set-up in this Board which has been implemented based on the recommendations of a leading management consultants employed by WHO/UNDP under an aid programme for this purpose is now appropriate. This is perhaps one of the premier occasions where management consultants have been employed in this part of the country for advice on the set-up of a public utility undertaking. A major factor in the set-up would be that all the functions of administration, finance and engineering have been individually centralised. This centralisation has a basic advantage in that all the services have become standardised, streamlined and properly

METRO WATER ORGANISATION CHART



monitored, but certain bottlenecks inherent in the system are worthy of specific mention.

Centralisation of the administration wing has relieved the field engineers of the complete functions relating to the control over staff. The corollary is that: (a) The maintenance or construction engineer is not in a position to act fast in filling up staff and leave vacancies in a manner which he would like to do, dictated as he is by the urgency of the field conditions, and (b) the extent of supervisory control over the staff is comparatively less efficient for field engineer since he has no punishment powers in finality. This has a somewhat serious reflection on the maintenance engineer, all the more since they are the senior unit officers representing the board who are in direct contact with the public and absolute staff coordination is required to ensure service to the public.

This amount of centralisation has also been recommended and implemented by the consultants in the various sectors of the engineering wing. In this wing a highly centralised organisation styled as planning designs and contracts has been formed in the central office with absolute and unitary powers for preparing plan proposals, drawings and contract settlements in respect of all projects to be implemented by the board. The engineers in the construction wing have been left with practically no powers in either approval of proposals or contract acceptance. The principle of this centralisation is no doubt a greater stress on the need for the updated technical knowhow which is absolutely necessary for design, and standardisation which is required for contracts. But the effect of this centralisation is the inability of the engineers in the construction wing to take spot decisions on problems emanating by field conditions and such inability results in serious delays.

REFLECTIONS AND PERFORMANCE

As was mentioned earlier, isolation of the water and sewerage service from the other functions of a civic body is a practice which is fast gaining momentum in this country. It is quite contextual now after two years of performance of the board to reflect upon certain experiences gained in the functioning of this organisation.

Public Involvement

At the time when the water and sewerage services were under the control of the civic body, there was a greater involvement of the public through their elected representatives, i.e., the councillors who were also in larger numbers. This is no doubt offset to an extent by nominated representative of the public in the Board of Directors, as well as Public Relations Committee which meet the public periodically in the various areas of the city.

Public Awareness

The public is still not fully conversant or aware of the constitution of the new undertaking as the inclination is more to go by the general concept that all essential services are to be maintained only by the respective local body. Such a phase should perhaps only be transitory and a greater recognition of the functions of the new undertaking should be forthcoming more quickly, especially since other related services like domestic lighting, telephones, etc., are even now vested with agencies other than the civic body. A specific item which requires to be mentioned under this category is the subtle difference between the functioning of a sewer (which carries the human waste) and the open storm water drain (which carries the surface drainage or the floods). The new organisation has taken over only the sewer system from the civic body whereas the civic body continues to maintain the storm water drains. At the time of formulating proposals for the board a decision as to the authority which is to exercise control over the storm water drain was taken after examining in detail various connected factors and the weighting factor in favour of the decision to retain the storm water drains under the control of the civic body appears to rest more on the principle that the functioning of the storm water drain is closely related to the safety and maintenance of the road. The public at large is, however, not in a position to discriminate this subtle difference between the two functions and occasions are many when complaints of malfunctioning of open drainage are passed on to the new authority.

Liaison with Local Authority

It is a paradox that all the water and sewer mains which constitute the life line of the functioning of the water authority have to be laid below the roads in the city which are owned and maintained only by the local body. It is no doubt true that the portion accommodates other service lines also like telephones, etc., but it is only the water and sewer lines which contribute to the maximum. This necessitates efficient and continuous liaison between the two organisations, especially at lower levels of administrative hierarchy to ensure that any installation or repair work in the water or sewer main is carried out without involving procedural delays and at the same time damage to the road structure. Better functional streamlining is required in this regard between the two organisations.

At the time, when the water and sewer services were under the control of the civic body, the water tax and the sewer tax were being collected by the same body as a part of the property tax and as a fixed proportion of it. With the constitution of the Metro water, the water tax and the sewer tax component is being collected by this new organisa-

tion independently based on the property assessment made by the corporation. Such an independent collection results in complaint by the public that the frequency of payments has now been doubled even though the quantum of payment has not changed inasmuch as two different organisations collect independently. Experience in the Metro water has, however, shown that independent collection of water tax and sewer tax has resulted in higher percentage of collection than earlier. This is perhaps attributable to two reasons:

- (i) the quantum of water and sewer tax is less than the net property tax and hence entails a greater inclination on the part of the consumer to pay without arrears, and
- (ii) non payment of this tax would empower the board to disconnect this essential service line. This argument holds good even for collection of water charges. Such a step is not possible in the case of the civic body for collection of the net property tax as it is no longer in charge of any essential service and the extreme coercive steps possible by the civic body is only to move the court for collection.

The concept of the water and sewer services to be treated as a commercial undertaking, even though it is for a public utility, like electricity, is fast catching up and constitution of a separate authority for this purpose would ensure this step to be implemented sooner or later. Such a commercialised approach should also attract more deposits from lending agencies and the public which would obviously be required for many more years to come to implement the various projects for upgrading the services.

The Act makes it clear that the charges for water supplied to economically weaker sections will be paid to the Metro water by the Corporation of Madras.* In fact such a practice is also prevalent in Bangalore city where there is a separate water undertaking, apart from the municipal corporation. The argument in favour of this procedure would rest more on the principle that it is a social obligation on the part of the local body to ensure that basic services are provided for economically weaker section since a general purpose levy is also collected by them in the property tax. The inability of an undertaking like the Water Board which is to run on a commercial basis is a pertinent factor in this connection. □

*Dependence of Metro water on tax powers and the transference of social obligation to the Madras Corporation are contrary to a commercialised approach to water and sewerage services—*Jt. Editor*.

Water Pricing: With Reference to the Calcutta Metropolitan District

P.K. CHATTERJEE

and

A.K. DUTTA

THERE IS a strong feeling among many that water supply in urban and rural areas should be free of cost and that it is not proper to charge the consumers. They argue that water being a vital element cannot be priced. Taxing water will only create additional burden to poor people and will result in misery. They further say that water is a God gifted natural resources—it can-not be sold by the government or the municipal authorities.

Apparently this philosophy sounds logical and liked by many. Let us now consider how this system affects the country, the government, the society, the people and the community as a whole. Are the poor really benefited by free water?

The water that is supplied to thousands of residents by house connections or street stand posts has to undergo several processes and is not just the God sent natural element. Lots of money has to be spent to collect, treat, distribute or in other words to produce potable water. In addition to these capital costs, recurring costs are to be incurred for operation and maintenance of the water system. The operating costs consisting of salaries of operational staff, cost of energy, cost of chemicals, cost of spares and repairs are not static but are increasing at a high rate. How this operating cost will be met? How the capital cost will be covered? How the interest on loan will be paid? Or how replacement units will be constructed after the expiry of the life of assets? Will these be subsidised by the government for all times to come? Will it improve the economy and really help the people? These are the questions one may ask.

PRESENT PRACTICE IN CMDA

At present, within the Calcutta Metropolitan District (CMD), municipal or corporation authorities partially charge water at a fixed

nominal rate, some name it as a portion of municipal tax as water rate. The municipal tax is based on valuation of property. But these revenues are able to cover only a small fraction of the operating cost and heavy dependence on other source for fund becomes imperative. CMDA is, however, seriously thinking of charging water tax to industrial, commercial and institutional consumers of Calcutta as elaborated subsequently in this paper.

DRAWBACK OF THE SYSTEM

The water system being unable to sustain itself cannot be operated properly nor they can be readily expanded to satisfy the growing demands of people particularly poor, who do not have water. Taking up projects entirely on grants is not a healthy sign for the country. Sometime the cost of schemes become high due to interests. Some external agencies are also unwilling to give loans if the public utility system of charging is not followed.

The net result will be a complete stagnation and no projects could be effectively taken up, completed or operated. However odd it may sound, making water supply free actually helps the affluent who consumes more water and who have several fixtures in their house and those poor people who are without minimum water have to suffer more.

Since the payment made by a consumer for water is far less than that required to produce it the rich by drawing more water gain the maximum. The poor being deprived of this water and for lack of distribution system expansion has to suffer. Moreover the nominal rate charged being independent of quantity of water—those residing near the headworks or overhead reservoir or pumping station are drawing more water without paying the required cost. As a result, those on the furthest end of distribution system have to pay the same nominal charge (depending on valuation) for less water. This is injustice. Moreover, the unequal distribution of water create problems in distribution system. In Calcutta, for example, the average supply is around 45-50 gallons per capita per day (gpd) but some are getting 60 gpd or more and some below 20 gpd. There is no check on wastages by individual household or through street stand posts. Since water is not charged on quantity basis, nobody cares how much water is consumed or wasted.

The question of affordability is raised some time, but the industries, commercial, institutional and rich are certainly not so economically backward that they have to depend on government subsidy.

NECESSITY OF WATER CHARGES

It is, therefore, necessary that the consumers should pay for water

services. Before coming to the mechanism of water taxation, affordability and practicability of water charging, we may summarise the benefits of water charging as:

- (i) Reduction of wastages: So more people can be supplied without additional cost. Cost of water will reduce. Less capital cost requirement;
- (ii) Equitable distribution of water as high pressure consumer will draw only as per their requirement;
- (iii) Less dependence on external loan. Less requirement of grants and subsidy. The funds may be allocated to other sectors with economic gain;
- (iv) Expansion of system may be taken up easily—in most municipal area the economically backward group do not have piped water supply. So by extension of pipe in slums or other areas more people can be served.

It is perhaps needless to elaborate the necessity of water taxing. Consumers should pay for the water services which require money—costly money and consumer should feel that to keep the system running they should pay back. Politicians, administrators and engineers should preach them constantly the necessity of paying for water.

MECHANISM OF WATER PRICING

Coming to the mechanism of water taxation, it may be stated that the main object should be the financial viability of the operating organisation. The revenue should cover: (a) operation, (b) debt service, *i.e.*, payment of interest on long-term and short-term loans and if possible—paying back loans of capital cost and depreciation.

Depending on the affordability a multi-tier tariff policy may be framed which satisfies the financial requirements.

Since the consumer characters in a metropolitan area like CMD are widely varying from social, economy and health point of view and as the quantity consumed are also different the water tariff structure should not be at a flat rate but should be different for different groups and there should be a cross-subsidy.

The consumers in the Calcutta Metropolitan district can be grouped into the following:

- Group A—Big industries and commercial institutions
- Group B—Medium industries and commercial institutions
- Group C—Affluent domestic consumers—high per capita supply—generally high consumptions

- Group D—Domestic consumer—middle level income and consumption
- Group E—Domestic consumer—low level consumption/income
- Group F—Street stand posts
- Group G—Urban/Rural—extremely poor backward community with poor health status

By cross subsidy between the different groups a workable system can be established.

The consumers in Group A should be charged not only operating cost, debt service, and loan repayment but they should also subsidise for the lower groups.

Group B and Group C, should pay operating cost debt service and depreciation if possible. Group D may pay the operating cost and debt service.

Group E may just pay the operating costs.

Group F. Here a nominal charge may be levied which is just sufficient to keep the water plant in good running condition so that the consumer can feel that by proper use of the system they can reduce the maintenance cost and thereby can benefit them.

Group G There is a strong case for making water free here and treating water as a social service. But here also the consumers may physically participate in operation and maintenance. In fact the cost of water production being low here, not much subsidy is required to be per 1000 paid here. Moreover, compared to economical, health and social benefits the revenues lost is insignificant.

CMDA APPROACH FOR CALCUTTA

The Calcutta Metropolitan Development Authority is seriously thinking of metering the industrial, commercial and institutional (ICI) consumers of Calcutta and charging them water tax on the consumed water. The considerations to be made while fixing the tariff are that the tariff should be sufficient to generate revenue which after meeting the cost of production shall cross subsidise the domestic sector. The second consideration is that the rate should not be too high. The total payment for water by any ICI consumer shall be comparable to the existing expenditure on water by him. Preliminary studies indicate that a rate of Rs. 8 gallons may be charged. This rate for ICI compares well with non-domestic rates of other cities of India.

The estimated ICI demand from Calcutta system is 25 mgd. So by fixing a rate of Rs. 8/1000 gallons, the expected revenue will be Rs. 7.3 crores/year. The yearly running and operation cost of Calcutta system for source, transmission, storage, pumping and distribution system is 9.6 crores. So 75 per cent of the running cost is covered by

ICI revenue. If we consider the annuity on capital cost along with operation and maintenance cost. The cost of water comes to Rs. 3.76/1,000 gallons. The rate Rs. 8/1000 gallons therefore provides for additional sum at the rate of 4.24/1000 gallons.

FINANCIAL ANALYSIS

After finalising the approach to the tariff issue, financial and economic analysis would prepare statements after studying the actual condition and forecasting future probable costs, investment in plans, water sales, operating costs, unaccounted for water and other financial parameters. They should examine how the financial stability of the organisation can be maintained by charging the poor group within say two per cent—four per cent of income and by cross subsidy between rich and poor, non-domestic – domestic, costly scheme—cheap scheme, etc. Several alternative financial plans may be prepared for consideration.

METERING

The question of metering, perhaps, comes simultaneously with the decision of levying water tax. It has been argued by many experts that the cost of supply, installation, reading and maintenance of meters for measuring water consumption of all consumers is prohibitive.

The following approach may be considered in that case:

Group A, B and C: 100 per cent metering

Group D and E—Group metering or district metering, so that the consumption of a particular locality can be found and which may be distributed among the consumers, either on valuation basis or on per capita basis or ferrule size basis.

Group F: The stand post system may be charged through 'concessionaire' system. This system may sound utopian but it is highly successful in many developing countries.

Group G: The question of metering does not arise.

Concessionaire System

In this system the local bodies will employ a 'Concessionaire' (to maintain the street stand post and collect nominal revenue) who will pay an amount to the municipal authorities depending on the water consumption through a stand post. The concessionaire will maintain and operate the stand post at his own cost. For his own interest he will see that wastages through the stand post is reduced to the minimum.

The 'Concessionaire' will be allowed to collect a minimum fee from the consumers for supplying water to the people. Water may be collec-

ted by a standard size drum or 'Can'—a fee of 2 to 5 paisa per drum may be fixed by the government. By efficient management and reducing wastages 'Concessionaire' will be able to make profit for his sustenance. If it is found that the people are unable to afford the price per drum the rate may be further reduced and 'Concessionaire's payment to municipality may be accordingly reduced. The system can be established by a single meter per stand post.

The other advantages are check on wastages, check on theft of taps, proper maintenance and above all reduction in recurring costs of replacement. Due care must be taken in fixing the water charge as well as 'Concessionaire's fee to the authority. He will not be allowed to make high profit. Quotations may be invited from local firms/cooperative for acting as 'Concessionaire' and the firm who will pay maximum to the municipal authority (the water rate paid by the people being fixed) may be selected against proper security.

In some countries of Africa, it is reported that this system is working satisfactorily.

CONCLUSION

In conclusion it may be stated that our approach to planning should change so that the system requires less capital costs as well as less operating costs. Only by that the water rates can be reduced. Low cost technologies with local materials should be developed. Installation of sophisticated treatment plant with high capacities, as stated to be recommended by some master plans, may not be ideal solutions. The technology and scale should gradually improve with the economic advancement. Particular attention shall have to be given for proper capacity in all components.

The fixation of appropriate technology, capacity and design period shall not be only a technical decision but economist should also comment on these.

The implementation of water rating policy is no doubt difficult in our country but it is neither impossible nor impracticable. By a joint effort of politicians, administrators, engineers and leaders this can be done. This has to be done. □

Book Review

Indian Economy: The Regional Dimension, AMITABH KUNDU AND MOONIS RAZA, Spektrum Publishers for the Jawaharlal Nehru University (Centre for the Study of Regional Development), New Delhi, 1982, pp. 150.

Interest in the regional aspects of development has a long and respectable history. Disputes on the causes of as well as solutions to the existence of regional disparities have been at least equally long standing. Many have regarded the emergence of leading and lagging regions-- in the world as a whole or within a country--as an indicator of development. It is indeed difficult to think of any country of some size which does not have relatively advanced and backward regions within it. Even the most developed of countries like the United States, Japan, France and the Soviet Union, all have their backward regions. In Latin America, it is not unusual to find states within the same country which have a per capita income which is as low as one fifth of the richest state. It should then be clear that the regional disparities that are observed in India are not unusual in either a historical or an international perspective.

Amitabh Kundu and Moonis Raza have done a service to the study of regional development by marshalling a large data set drawn from a variety of sources. They have compiled about 190 indicators covering agriculture (productivity, production conditions, agrarian relations, changes in agriculture), the economic base of villages, economic base of towns and of cities, economic infrastructure (banking, transport, rural electrification), literacy, settlement structure and organisation of space and on the regions in relation to the country. What is different about their data set is that, unlike most discussions on regional issues which are based on states as units, it is based on National Sample Survey (NSS) regions which are "fairly homogeneous in terms of their ecological set-up and are generally not marked by intra-regional disparities of a high order." Thus 58 regions are delineated but 9 (covering mostly hill areas and islands) had to be omitted because of non-availability of data. It should be noted that even such a classification leaves the average region with over 10 million people which is the size of many countries in the world. Despite the availability of so much data Kundu and Raza have resisted the temptation to bombard the reader with

masses of figures: the book is refreshingly lean and compact and to the point. If anything they have erred in the opposite direction and, perhaps, not given enough of a glimpse into their data.

The authors trace the origin of regional disparities to the colonial exploitation of the country before independence. The spatial structure of the country was formed essentially during the nineteenth century (1813 to 1914) which is termed the period of industrial capital. It then 'crystallized' during this century (1914 to 1947) in the period of finance capital. The argument is that the pattern of colonial investment reflected the needs of the metropolitan country: thus, for example, major port cities developed to service the export of raw materials needed by the metropolis and the railway network was designed to service these needs rather than that of the domestic economy. To quote: "This process of progressive 'Satellitization' and stultification of the satellites in the chain like structure of exploitative mechanism constitutes the crucial element of the spatial structure in the colonial economy". This process changed somewhat during the post-independence period. The main difference has been that: (i) the internal allocation of resources and infrastructure investment has not any more been in the service of the metropolitan economy, and (ii) that the state has played a more decisive role in the capital accumulation process. The authors feel, however, that these changes have not gone far enough towards "smashing up the pre-existing structure of colonial under-development but towards adapting it to the requirements of a higher rate of domestic capital accumulation". It is suggested that the patterns of post-independence investment in both agriculture and industry have further strengthened the process of the establishment of spatially disarticulated structures of industrialisation and sharply accentuated regional disparities in agriculture.

It is with this background and ideational framework that the authors want to test 3 main propositions in this study:

- (i) The strategy of agricultural development adopted in India has led to the acute differentiation in primary production in the hinterland.
- (ii) The process of industrialisation has continued to be weak, disarticulated, regionally clustered and had little impact on regional economies.
- (iii) The organisation of space continues to be dysfunctional with respect to the production processes.

The next three chapters deal with each of these propositions sequentially. Chapter II begins with a concise background of the colonial 'legacy'. It is pointed out that expenditure on public works, parti-

cularly irrigation, was assiduously neglected until very late. The extent of this neglect is reflected in the fact that the city of Manchester alone spent more on its water supply than the East India Company on all public works in the whole country during a 14-year period!¹ The marginalisation of traditional industry resulted in an *increase* in the proportion of labour force engaged in agriculture between 1891 and 1921. It is also shown that public investment in irrigation in Bengal, Bihar and Orissa combined was less than 10 per cent of that in Punjab in the early part of this century. One reason given for this differential attitude is that the heavy investments in railways and communications in eastern India effectively crowded out irrigation investments. Other reasons are that the dietary habits and markets in Britain were more receptive to the produce of western India (but was this produce actually exported to Britain?); and that the permanent settlement in eastern India made it difficult to collect irrigation charges to finance the investments.

Having established the colonial legacy, the authors then proceed to document the increasing levels of regional disparity in agricultural productivity (measured in different ways) in the post-independence and especially the post-sixties period. While the documentation of these disparities is done with great care and with informative cartographic illustrations, the analysis of the causes of these disparities is unconvincing, too mechanical and, therefore, leaves much to be desired. The approach is essentially that since these disparities exist (in incomes, in productivity of land, in productivity of workers, etc.) there must, *prima facie* be something wrong. There is little evidence of an understanding of the processes underlying agricultural production and productivity. The advent of the green revolution is derided repeatedly. That it has caused regional disparities, there can be little doubt: but would the state of the country have been worse and even of regional disparity without the green revolution? Further, apart from the better availability of modern inputs and irrigation in the north-western region, the *main* course of the green revolution was the discovery of high yielding varieties in wheat which were *suitable* for the agro-climatic conditions of this region. It was possible to adapt these Mexican varieties very quickly to Indian conditions because of the existence of an agricultural research system in the region which had received much greater funding and attention in the whole post-independence period than other regions and crops.² The real question then

¹A similar contemporary example is that the U.S. government has spent more on the still unfinished remodelling of Union (Railway) station in Washington than all the World Bank loans to Calcutta.

²For a detailed state and district wise analysis documenting this see R.E. Evenson and D. Jha, "The Contribution of the Agricultural Research System to Agricultural Production in India, *Indian Journal of Agricultural Economics*, December, 1972 and Rakesh Mohan, "Contribution of Research and Extension to Productivity Change in Indian Agriculture", *Economic and Political Weekly*, September 28, 1974.

relates to the possibility of significant technological changes that could have occurred in the crops (mainly rice) in rain-fed and flood-prone eastern India and in the semi-arid regions of eastern India. What is the limit of productivity changes in these regions in the absence of technological change? Has this been reached? What public policy and investments could have had an effect on these constraints? There is, unfortunately, little discussion on these key issues which would seem to be at the root of the increasing regional disparities documented in this book. There are also some rhetorical flourishes which mar this otherwise scholarly work. For example, with reference to the 27 regions in the country which have recorded very low or negative changes in land productivity: "The abject poverty of the toiling people in these regions reduce some of the tall claims of the votaries of green revolution to an agonising mockery." In reality, one would be hard put to find any advocate of the green revolution who would claim benefits in these unfortunate regions. The basic fact of the matter, as correctly documented by Kundu and Raza, is that the gains of the green revolution have essentially been confined to the north-west and in some of the coastal regions. The rest of the country has gained from these changes only insofar as the total food supply has increased and hence food prices have been kept in check. Presumably the people in the stagnant regions would have been worse off in terms of food availability in the absence of these gains. The alternative posed by the authors is: basic agrarian reform, removal of institutional bottlenecks and the large-scale increase in the spread of income neutral surface-flow technology which would have minimised the perpetuation of vertical and horizontal inequities. What is not discussed is how this could have been done in the particular socio-economic conditions and the polity which happens to exist in the country. There is also little evaluation of the *production* gains (as distinct to distributional gain) which would have resulted from such a strategy. One had expected more from Kundu and Raza especially in view of their unique data set.

Chapter III deals with agglomerated and dispersed patterns of industrialisation. Once again, a concise introduction is provided to industrialisation in the colonial period and the point established that within a few decades in the early nineteenth century India had been turned into a net importer of manufactured goods and a net exporter of raw materials. It is implicitly conceded that many of the traditional industries would probably have decayed sooner or later in the face of competition from modern industry. But the important issue is that "the agony of colonial India was characterised by the fact that while the old world was dying, the new was powerless to be born." As a result, old thriving large industrial urban settlements like Surat, Dacca and Murshidabad decayed and atrophied—much as Madras and Calcutta

are currently being allowed to atrophy now because of misguided policies. It is suggested that these traditional centres of craftsmanship would have, if allowed to, acted as growth points for modern industrialisation. "The breaking up of the symbiotic links between agriculture and household industry in the vast rural hinterland imposed insurmountable constraints on vertical shifts within the work force and led to the persistence of a disproportionately large primary sector in the colonial economy." Modern industry was established in port enclaves and in some selected centres in the interior but these industries did not absorb the vast numbers of the labour force released in traditional industry. Indeed, the percentage share of the work force in industry declined from 5.5 per cent in 1911 to 4.2 per cent in 1941. In summary, the structure of industry and urbanisation inherited from the British was characterised by 4 key features: (i) industrialisation was thwarted in India with a view to making it a raw material supplier and a market for British goods; (ii) the industrialisation that did appear was far from adequate to absorb the workers squeezed out from the traditional industries; (iii) a capital goods sector did not develop; and (iv) the regional structure of industrialisation was highly dysfunctional with unduly high concentration around ports.

The key feature about the post-independence record of industrialisation that emerges is that while there has been a respectable increase in the proportion of value added from manufacturing the proportion of labour force engaged in it has hardly changed. Furthermore, it is found that the Bombay and Calcutta regions between themselves account for as much as 22 per cent of all employment in non-household manufacturing while there is little doubt that organised industry in India is relatively concentrated. Kundu and Raza indulge in a surprising bit of hyperbole on the share of urban areas in manufacturing. They exclaim with apparent surprise that the 80 per cent of the people living in rural areas have a share of only 25 per cent of non-household manufacturing; that the 10 per cent living in cities claim 50 per cent, and towns the remaining 25 per cent. Is this really that surprising? If there was significantly more *non-household* manufacturing in villages, would they quickly not turn into towns in view of our census definitions? If there were no economies of scale (not mentioned once in this book) or agglomeration economies, would there be any towns (*i.e.*, concentrations of population)? It is a pity that, once again, though Kundu and Raza document the facts of concentration carefully they are weak on analysis. There is, for example, not one mention of comparative advantage as a determinant of regional specialisations. The question that should be asked is whether the level of concentration that has emerged—building on what existed at independence—surprising in the context of international experience of both capitalist economies as well as communist economies.

Further, what would have been the cost of greater dispersal of industries? In point of fact, there has been considerable decentralisation of industry since independence. Almost all organised industrial activity was concentrated in Calcutta, Bombay, Madras, Ahmedabad and Kanpur. Now substantial industrial concentration has taken place in cities such as Bangalore, Hyderabad, Delhi and later in Bhopal, Ludhiana, Jullundur and the new steel towns. A glance at the map reveals that there is now a major industrial centre in all regions of the country outside east, central and the north east India. This is no mean record of dispersal keeping in view the small size of the Indian industrial base and the relative slow growth of industry. Another careful study³ on the location of manufacturing reveals that there has indeed been substantial redistribution of industry over the past two decades. It is undeniable, however, that industry is still concentrated in a few regions and states. As late as 1976, Maharashtra, West Bengal, Gujarat and Tamil Nadu together accounted for about 55 per cent of total value added and 52 per cent of employment in manufacturing (factory sector) in the whole country. Maharashtra alone accounted for 25 per cent of value added and 19 per cent of employment. In 1961, however, these four states contributed as much as two-thirds of value added and about 58 per cent of employment. A systematic approach to measuring industrial deconcentration among states is to compute an inequality index of the distribution of industry among states. Sekhar computes the Theil index and finds that there is a marked decrease in the value of the index over time. It must be emphasised that despite these findings, industry has *not* deconcentrated from large cities: only that large cities have increased in number.

Kundu and Raza point out that the growth rate of "large scale industrial units" has slowed down in the metropolitan cities—at least partly as a result of policy measures militating against the licensing of large units in these cities. Calcutta and Madras have suffered particularly as a result and now face acute employment and income problems. The study of the determinants of industrial location is still in its infancy. Most countries with relatively backward areas have had great difficulty in implementing industrial deconcentration policies and India has, until now, suffered the same fate. Much more attention has to be paid to increasing the employment potential of industry—even if it has to be concentrated. Distinctions in analysis have also to be made between industries particularly linked to the agricultural hinterland (*e.g.*, processing industries, repair and manufacture of implements etc.) and those that are not. The latter can be termed footloose industries but

³Udai Sekhar, "Locational Aspects of Indian Industrial Policy," Washington, The World Bank, Urban and Regional Economic Division, 1981, (mimeo).

which might require the agglomeration economies of concentration to be viable. Prosperous agricultural regions, like the Punjab, spawn the first pattern of industry along with a relatively dispersed pattern of urbanisation.

The last Chapter on "Spatial Organisation and Regional Development" attempts to relate the pattern of industrial development with the pattern of regional and urban development. "The urbanisation process in India has been essentially constrained since independence by the anaemic agricultural base and the weak and disarticulated process of industrialisation. The urban centres continue to be, by and large, stultified and dysfunctional mainly concerned with distribution and other services rather than with production" (p. 113). At another point it is stated that "the cities not only have a very high proportion of manufacturing employment of the country but also a relatively well developed industrial base, if the latter is measured in terms of the share of non-household workers to the total work force" (p. 86). Further, "Thus the thesis that the process of industrialisation and urbanisation are divorced in the Indian context, as proposed by several western scholars (and by Kundu and Raza as well)⁴ does not stand to empirical verification" (p. 130). This spate of contradictory remarks indicate that whatever be the facts (as documented by themselves) the authors are predisposed to finding cities dysfunctional. Thus, Indian cities are at once hogging too much of industry to the detriment of rural areas as well as floundering in the quick sands of the 'bazaar economy' continuing to devour without digesting surplus labour from the hinterland by their unique capacity to 'involute' (p. 113). Whatever the poor Indian cities do, they cannot win against Kundu and Raza! A whole section is devoted to showing that urban population is getting more and more concentrated in large cities (*i.e.*, cities over 1 lakh people): the percentage of urban population in cities has increased from about 23 per cent in 1901 to 52 per cent in 1971. Again, is this surprising with population growth all around and with the number of cities increasing constantly? Is the experience any different from any other country, capitalist or socialist? Can anything else be expected? It happens to be the case that the size distribution of urban population in India is one of the most even in the world. But there continues to be excessive and continued concern with concentration in India.

Despite the vigorous criticism offered above, this slim volume is well worth study. It is seldom that the issues of regional development are stated so concisely as well as lucidly. It is also seldom that such good documentation is available in as accessible a fashion as it is this volume. If there is any quarrel with the book it is that Kundu and

⁴My insertion.

Raza do not maintain their usually high standards of analytical rigour in deriving the implications of their own findings.

—RAKESH MOHAN



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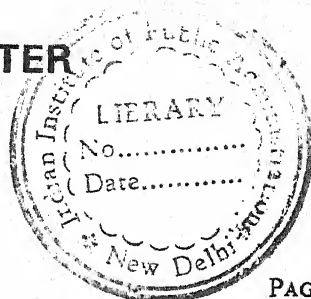
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Contents



	PAGE
Editorial	v
Articles	
PROBLEMS AND PROSPECTS FOR SHELTER IN URBAN INDIA: SOME POLICY ISSUES <i>Rakesh Mohan</i>	1
THE ROLE OF ECONOMIC ANALYSIS IN PUBLIC POLICY HOUSING <i>T. Krishna Kumar</i>	11
THE EXTENT OF HOUSING IMPROVEMENT IN A SQUATTER UPGRADING PROJECT <i>Emmanuel Jimenez</i>	39
NON-PLAN SETTLEMENTS IN A PLANNED CITY <i>Madhu Sarin</i>	54
SQUATTERS AND SETTLERS IN POONA: A CASE STUDY OF TWO HUTMENT SETTLEMENTS <i>Meera Bapat</i>	94
URBAN HOUSING PROCESSES AND THE POOR: A CASE STUDY OF AHMEDABAD <i>Meera Mehta</i>	106

Bibliography**ECONOMICS OF HOUSING: A SELECT BIBLIOGRAPHY**

129

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Editorial

The study of housing is still somewhat rudimentary in our country. This is partly because housing can be studied equally competently, though for different purposes, by architects, engineers, planners, economists, sociologists and other social scientists. Indeed, each discipline has to add to the insights of the others to be able to make significant progress in the study of housing. It is probably because of this interdisciplinary nature of housing that it has been somewhat neglected by social scientists. This issue attempts to combine the somewhat micro-approach of economists with the more micro-observations of architects, planners and sociologists. Rakesh Mohan, T. Krishna Kumar and attempt to give a synoptic view of housing in Urban India and review the problems with current policies and prospects for improvements. Madhu Sarin, Meera Mehta and Meera Bapat give insightful accounts from case studies of how the poor provide for their shelter in innovative ways in an essentially hostile policy environment where no place is made for them. Emmanuel Jimenez provides what could be seen as a link article demonstrating the substantive economic worth of squatter dwellings which are often demolished at will and seen as nuisances by public authorities. This is very good example of the use of economic analysis at the micro-level but the results of which can be very useful for policy purposes. It is hoped that the publication of these articles can kindle interest in more innovative studies on shelter.

We are grateful to Dr. Rakesh Mohan for acting as the guest joint-editor for compiling the special issue.

—Editor

*Problems and Prospects for Shelter in Urban India: Some Policy Issues**

RAKESH MOHAN

THE PROBLEM that perhaps causes the most concern to a majority of urban dwellers is the problem of finding an appropriate place to live. The popular feeling that prices of shelter of all kinds have been rising excessively would indicate that housing investment has not kept pace with increases in housing demand. The National Income Accounts indicate that housing investment as a proportion of gross capital formation in the country has declined from about 30 per cent in 1950 to only about 12 per cent in 1975. To a large extent this is, as should be, expected in an economy undergoing considerable diversification with massive investments in industry. What is more worrisome, however, is that the rate of growth of gross capital stock in housing (in terms of real value) has been only about 1.5 to 1.6 per cent a year¹. That having been said it must be admitted that the quality of the data on capital formation on housing is somewhat uncertain. It may be that capital formation in housing is consistently underestimated because of the methodology used. Nonetheless, if the underestimation is not increasing, the trend mentioned above may be correct. Census data indicate that the quality of shelter per capita has declined over the last 30 years as measured by indices of crowding. Between 1961 and 1971, for example, the average number of persons per room increased from about 2.6 to 2.8. Surprisingly, the urban and rural trends are identical in this respect. It would seem that, despite the limitations of the data available, one can conclude that the additions to housing stock have not kept up with population growth in both urban as well as rural areas and hence housing conditions have been declining in the country.

A new approach to the provision of shelter is, therefore, sorely needed before conditions decline even further. Paradoxically, it must be more bold in providing for an expanded housing stock, as well as more

*The views reflected in this paper are those of the author and should not be attributed to the Planning Commission.

¹N.B.O., *Handbook of Housing Statistics*, 1980, Table 7.

cautious in what is expected to be provided taking account of the existing levels and distribution of income in the country. Given the low levels of income and the low rate of growth it would be unrealistic to expect people to devote much greater proportions of income to housing expenditure. Hence the approach should change from the prescription of unrealistic norms to the provision of facilities and conditions that enable people to obtain the maximum quality of shelter according to their needs as well as abilities.

A number of simultaneous actions need to be taken at the national, state and local levels to improve the situation. At the national level, more realistic economic estimates need to be made of the likely demand for housing over the next decade. Measures then need to be taken to provide an institutional structure which permits easier investment in housing—both physical as well as financial. Further, the materials implications of increased investment in housing need to be worked out so that their availability can be planned for. Since almost 90 per cent of housing investment is done in the private sector, national policy must recognise this and measures should be taken such that impediments restraining housing investments and finance are removed. Some of these impediments, such as, rent control laws, have to be dealt with at the state and local levels. Further, at the local level, various town planning and building by-laws affect housing investment in different ways. Adequate recognition is not given to the role of 'informal' or 'unorganised' or 'popular' housing which effectively provides shelter to the vast majority of the urban poor. Despite good intentions, it is unlikely that the public sector can directly provide shelter to the poorest of the urban population; it must, however, assist them in their own efforts. State and local authorities should understand these problems and then devise institutional ways to solve them.

ESTIMATING HOUSING DEMAND

Problems in housing have traditionally been discussed in terms of prevailing 'housing shortages'. While different estimates are available, they are usually very large numbers which have little hope of being met. The policy response is then one of helplessness in the face of such large numbers. This is not surprising since any objective definition of adequate levels of even the barest minimum of shelter implies that a very large number of existing modes of shelter are simply inadequate. Large 'backlogs' of housing are then invariably found. A more realistic as well as correct approach would be an assessment of feasible demand taking account of the prevailing income distribution as well as consumption patterns. Associated with that must also be an assessment

of the volume of household savings which could possibly go into financing shelter.

In the absence of regular and good housing surveys it is indeed difficult to make systematic housing demand projections. The decennial census does give an inventory of housing in the country classified by types of houses and by the materials used. It does not, however, give any estimates of household expenditure in rents or in housing investment. Hence somewhat indirect methods have to be found. One such method consists of the following steps:

- (i) The approximate income distribution in urban areas in the country.
- (ii) The 'maximal' proportions of income that households in different income groups would be willing to spend on housing (assuming that housing finance is available for long term mortgages).
- (iii) The affordable capital costs of a new home by income groups.
- (iv) The annual incremental demand for new housing in terms of units by income group.
- (v) The gross annual demand for housing investment.

In making these estimates a number of assumptions are necessary. The most recent distribution of income available is for 1975-76 in the NCAER study "Household Income and its Disposition" and the most recent consumption distribution available is for 1973-74 from NSS. The two studies give somewhat different results, hence why an approximate distribution of households can be derived after accounting for inflations upto 1981. Secondly, there is no information on household expenditures on housing for owner-occupied housing. The NSS does give rental expenditures for renter households. Hence approximations can be made for maximal possible housing expenditures taking account of the essential expenditure necessary for food. The range assumed could be from 10 per cent of total expenditure for the lowest income groups to 40 per cent for the highest. Third, it may be assumed that long term (20 years) finance would be available at rates of interest varying from 5 to 12 per cent a year. Fourth, urban population may be assumed to grow at $3\frac{1}{2}$ per cent per year and replacement demand to be $1\frac{1}{2}$ per cent. With all these maximal assumptions, it turns out that the total volume of urban housing investment demand would be in the region of just over Rs. 4000 crores at 1980-81 prices. The current estimates of gross capital formation in national income accounts in urban housing are about Rs. 3000 crores. This implies that even if housing finance were easily available to all urban households, and even if *all* households were willing to devote a higher proportion of income on

housing than currently seems to be the case, the resulting increase in housing investment would only be about a third of current levels of investment. If appropriate corrections are made for underestimation of current estimates of gross capital formation in housing and for the 'maximal' estimate derived here, it would seem that the institution of a new liberal housing financing system is unlikely to demand much more than Rs. 500 crores as additional housing investment.

The main point of this exercise is to demonstrate that the issue of shelter is not an insoluble problem; that the increase in the availability of housing finance that may be required in any realistic assessment of savings and investments patterns is quite possibly within the reach of existing resources. Further, it is quite possible that if good financial instruments are available for the purposes of housing, the level of savings could increase enough so that radical rearrangement of investment priorities is not necessary.

ELEMENTS OF A NEW APPROACH

Having derived an estimate of expected housing investment as an aggregate it is necessary to spell out a new approach which could help in implementing the additional housing needed. In order to arrive at such an approach it is necessary to distinguish various segments in the housing market which require a variegated approach.

Housing for the Poor

Typically, the poorest of the urban dwellers—as many as 30 to 50 per cent in most cities—live in dwellings which have been constructed by themselves or with the help of neighbours, friends and local artisans and construction workers. This would include squatters as well as other slum dwellers. The dwellings range from mud huts to pucca structures. The key point is that in this sector, there is little use of architects, contractors, engineers, etc; there is little formal design; much of the investment is physical as opposed to financial; materials used are often waste materials not used elsewhere; and so on. Hence the poor are able to construct dwellings at cost much lower than any system of public sector construction can permit, yet their investments are substantial both as an aggregate as well as for each household. This sector may be termed the 'Popular Sector' and this kind of investment must be regarded as very useful—rather than as a nuisance of slum dwellers as is often the case. Indeed, since most of these dwellings are not able to meet the minimum standards laid out in most local building codes, they become unauthorised by definition. A survey of Poona slums indicates that the best shanty dwellings² are comparable to or better than any public sector provided

² Brick or stone masonry walls, adequate ceiling height; clay tiles, asbestos cement or galvanised iron sheets used for roofing, built on a foundation; airy and well lit; M. Bapat, *Shanty Town and City: The Case of Poona*, 1981. See also Meera Bapat on Poona in this issue.

EWS housing, cost just over Rs. 2000 on average—in contrast to Rs. 8000-10,000 cost which is the minimum that the public sector is able to provide. National policy must recognise this cost advantage; public outlays for shelter for the poor can then help a much larger number of people since unit costs would be much lower.

The approach should be to identify the specific constraints that the poor face in their quest for shelter. The public sector should not attempt to provide standards that are higher than what the poor can afford and for which an adequate amount of subsidies cannot be found given other needs in the economy. Innovative solutions have indeed been found in different places in the country. One good example is the Hyderabad Urban Community Development Programme, another is the Bustee Improvement Programme in Calcutta, while another is schemes carried out by the Greater Cochin Development Authority. The Urban Community Development Programme in Hyderabad is now about 15 years old but housing activities in the programme are of more recent vintage. The idea is essentially to give low interest loans to dwellers *in situ* and assistance in the procurement of materials. Because of the community development programme this can be done for groups of people at a time so that whole communities get upgraded. The Bustee Improvement Programme in Calcutta does nothing to existing individual structures but makes improvements in common services such as water supply, sanitation and the paving of lanes. The Cochin Programme provides assistance to people in the shape of loans and materials for upgrading existing dwellings. Other innovative programmes, some community organised and others initiated by voluntary organisations, can be found around the country. Their results can be summarised as follows.

In general, the government should eschew direct construction of houses for the poor. Public agencies should concentrate on helping people with activities that they themselves are not able to provide:

- (i) public services, such as, water supply and sanitation; provision of roads;
- (ii) land development;
- (iii) availability of housing finance in small amounts for purchase of materials for new construction, as well as repairs;
- (iv) provision of easy availability of materials that are typically used;
- (v) providing security of tenure;
- (vi) removal of legal impediments to such housing.

It is often argued that such a policy would merely perpetuate slums. This is true in the sense that people would continue to live in structures

that are regarded as inadequate by most engineers and architects. But policies, such as, slum clearance, provision of public housing, etc., are worse because they can only provide for a fortunate few while others are totally neglected. It must be recognised that national resources are conserved when people are allowed to use waste and recycled materials to provide shelter for themselves while the public sector encourages these activities by helping in the provision of finances, materials and security of tenure. Another key insight gained from the experience of different programmes around the country is that there is a great variety of solutions that must be sought in the improvement of shelter for the poor. Thus public programmes must be such as to provide flexibility in the pattern implemented. A major problem in the implementation of programmes involving the disbursement of small loans to large members of people is that of high transaction costs per loan amount. Here also, non-formal methods have to be found for the disbursement of loans as well as the collection of payments so that the high costs (to the financing agency as well as the consumer) are reduced considerably. Again, different methods have been found for such activities as by the Working Women's Forum in Madras and by the Self-Employment Women's Association in Ahmedabad for administration of small loans for self-employed women. In each case a certain degree of community organisation is a must.

Housing for the Better Off : Necessity of Housing Finance

The richer half of the urban population lives in what might be termed as formal dwellings provided by both the private and public sector. The majority of housing is still provided by the private sector though the public sector's contribution has been rising since the formation of HUDCO at the national level and of housing boards in most states. The Sixth Plan document expected the total capital formation in housing to be about Rs. 13,000 crores (at 1979-80 prices) over the Plan period of which only about Rs. 1500 crores are expected to come from the public sector. The key constraint in housing investment has been the lack of an organised system of housing finance on a large scale. It is only a few agencies which provide finance for housing: employers, both government and private; LIC; provident funds; cooperative societies, etc. At present it is difficult to obtain an accounting of the estimated amount of organised finance available for housing. While many employees in the organised sector have access to such finance, the self-employed and others outside the organised sector have few such sources of finance. It is, therefore, imperative that a widespread system of housing finance be considered urgently in the country. Setting up a widespread system of housing finance requires a number of linked actions. The aim is to provide institutions at the local level where an individual can go to

obtain mortgage financing at reasonable rates for a long term. The key problem in instituting such a system is the availability of long term finance. This constraint can be broken if the following types of institutions are formed simultaneously:

- (i) Apex Housing Refinancing Institutions;
- (ii) Mortgage Insurance System; and
- (iii) Local-level housing finance institutions.

Local-level institutions, such as, Housing Banks, should be able to mobilise savings under different schemes. They can be made attractive to small investors by providing saving instruments which offer somewhat better terms than other existing schemes. This would obviously have to be modulated according to other priorities in the economy. The Housing Bank would, therefore, be mobilising savings at the local level which would then be ploughed back into the community in the form of housing loans. They can further increase their liquidity by refinancing the mortgage from the Apex Refinancing Institution. The Apex Refinancing Institution—say, the National Housing Fund—could be run on lines similar to the ARDC. It, in its turn, could raise funds from long term sources of finance such as employees' provident funds, the LIC, by floating debentures, etc. The provision of mortgage insurance would make the mortgage safe and marketable securities. The mortgage insurance fund could be built up by making it compulsory for each mortgage to buy insurance. Naturally, the Reserve Bank would need to start off the national housing fund with seed money. Later, the system becomes self-financing as the mortgage loans are paid off.

The establishment of such a system would have two effects. First, a large amount of financial resources which are currently invested in housing outside the organised financial system would begin to flow through the new system. Naturally, to the extent that black money is used in housing investment, that would remain outside the system unless instruments are designed to utilise black money for this purpose as well. Judging from the operation of the Bearer Bonds scheme it is likely that a significant amount of resources could be forthcoming, if allowed, even if the return offered is low.

At the same time, the easy legalisation of unaccounted money cannot be recommended so readily. The second effect of the establishment of a housing finance system can be a higher demand for housing. The maximal estimate derived earlier was an increment of about Rs. 500 crores annually when all urban households have easy access to such a system. Naturally, in its initial stages demand would not immediately attain this volume. It is difficult to estimate, at present, the full resource implications of the establishment of a large scale housing finance system.

But it is imperative that such a system be instituted. Naturally, the implications of such a scheme need to be worked out in terms of the additional demand for land, materials, labour, and finance that would result. Hence measures should be taken so that a housing finance scheme is worked out in detail along with its implications in time for its inclusion in the Seventh Plan.

The public sector can, perhaps, restrict the direct provision of housing to these middle income groups: the high income groups can be left to themselves if there is better availability of finance. Secondly, the public sector should invest heavily in land development since that is difficult for small private sector firms to do. But the land so developed must be sold at economic prices so that housing that comes up is of appropriate densities.

IMPEDIMENTS TO HOUSING INVESTMENT

There are a whole host of legal impediments that also hinder housing investment. Rent control legislations exist in almost all states which make rent frozen at about 1950 levels for buildings existing prior to that date. For later buildings rents get effectively frozen at the time of first rental. Furthermore, the protection of tenants makes it almost impossible to enforce lease terms on the duration of rental. As a result some house owners would rather keep their properties vacant in preference to renting them out. Speculators prefer to keep houses or flats vacant in expectation of higher prices and for the fear that a tenant would not leave when necessary. While it is undeniable that: (i) tenants must be protected from unscrupulous landlords, and, (ii) rents should be restrained from rising 'unduly', it is now necessary to review the rent control legislations in order to encourage housing investment. In times of high or regular inflation there should be some provision for rents to rise as well. Furthermore, if it is true that housing investment is curtailed because of the existence of rent control and that even constructed houses are held off the market, it must be the case that housing rentals and prices of new houses are higher than they otherwise would be. Thus it is not clear at all that rent control actually protects tenants as a whole or only those tenants who happen to have been tenants for a long time. Furthermore, NSS data indicate that the proportion of renters increases as income increases for households in urban areas. This suggests that rent control benefits the better-off any way. As in the case of the establishment of a housing finance system, recommendations for the amendment of rent control legislation need to be carefully worked out but it must be clear that these amendments are highly over due.

Another well known effect of rent control is the resulting poor

maintenance of existing buildings. If rent control legislation is altered it would also become easier to finance repairs to existing buildings. In fact, the suggested housing finance system would be designed such that house repairs in general should be permitted to be financed. The importance of this can be gauged from the simple fact that almost everyone (excluding the pavement dwellers) has a dwelling to live in. Thus repairs and upgradation of existing dwellings would do much to improve shelter in the country in an economical way.

Other impediments to housing exist in the form of buildings bye-laws, density norms, etc., which are usually local regulations. It is not being suggested that such norms should not exist at all. One of the problems that is caused by the existence of such norms is that the minimum cost of a dwelling that conforms to these norms is such that it is out of reach of a large proportion of the poorest people. By definition then they have to live in illegal structures whose security of tenure is necessarily uncertain. They are, therefore, discouraged from making permanent investments. The regulations should essentially concentrate on the provision of a healthy environment in terms of water availability, sanitation and pollution and regulate structures only for protection from danger. The poor would then be able to construct legal structures which can be developed incrementally.

The third kind of impediment is concerned with the existence of highly restrictive land bases and the absence of legislation allowing ownership of units in group housing. The essential idea behind restrictive land leases which forbid or regulate transfer of property within specified time period is to discourage speculation and particularly for properties provided by the government at subsidised rates. The aim is to capture to government account a portion of the unearned increments in the value of land. The effect of such restrictions is mainly to drive such transactions underground so that the government does not collect any unearned increments. The problem would be minimised if land is not given at subsidised prices in general—except to the poorest. Secondly, if in every city a land price publication system is instituted and land prices are announced for every area of the city annually, it would be easy to collect portions of the unearned increments to land value. Transfers of property can then be freely allowed.

Many states still do not have adequate legal provisions for the ownership of units in group housing. In the interest of conservation of land, group housing must be encouraged wherever possible and the necessary legal provisions made. It would then be possible to make mortgages of such units as well.

SUMMARY

An examination of the available data reveals that investment in urban (as well as rural) housing has not kept up with demand over the past three decades. A new approach to housing would take account of the existing social and economic realities of the country. Considerable improvements can be made in the provision of shelter if the activities of the poor in providing their own housing are regarded as legitimate and aided by the government, as opposed to policies which regard them as a nuisance. A widespread and decentralised system of housing finance which caters in different ways to different income groups should be set up. Calculations based on existing data reveal that the additional resources required are within the feasible resources available in the country; moreover, additional savings could be generated if appropriate financial instruments are found connected with shelter. The public sector participation in shelter should concentrate on providing the essential public services that people themselves cannot provide; aiding in the availability of materials; providing security of tenure; and in setting up the appropriate institutions at different levels which would make the availability of housing finance a reality. □

*The Role of Economic Analysis in Public Policy on Housing**

T. KRISHNA KUMAR

HOUSING POLICIES in developed countries, such as, USA and UK, are generally based on systematic economic analysis of the housing markets, with special emphasis on welfare effects of alternative public housing policies. In our country we have launched several public housing assistance schemes, such as, slum clearance; housing for the economically weaker sections; rent control; low-income, middle income, and high income group housing; housing for plantation workers; industrial housing; and housing for the government employees, etc. While all these schemes are based on welfare considerations, there is very little discussion in the Indian economic literature on the costs and benefits associated with these social housing schemes. In particular, there is very little economic analysis of the housing sector. This paper, therefore, deals with the role of economic analysis in public policy on housing, with emphasis on possible applications in the Indian context.

If one examines the Indian literature on economics of housing it is replete with description, using aggregate data of the past, present, and future housing needs. This description is based on such a rudimentary notion as "each family needs a house". Such housing needs are compared with the existing and projected housing stock at a macro level. None of these studies take a micro economic approach to determine the factors that determine the demand for and supply of housing by house type and by location. Analyses of micro economic behaviour of housing demand and housing supply are the building blocks of the economics of housing. An understanding of the economics of housing is the basic prerequisite for a systematic appraisal of alternate public (or social)

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housing assistance schemes.

Adequate care should be taken to see, however, that micro economic supply models, based on competitive market conditions for financial, material, and labour resources which are used in developed countries, are not blindly applied to model the housing supply in our country. There is a need to model the supply behaviour taking into account imperfect financial, materials, and labour markets. In particular, one must realise that in our country the extent of builder-developer organisation is so limited that housing is usually supplied by the person who demands it. This is done by purchasing materials and hiring professional services. The considerations underlying the demand for housing also seem to be quite different in our country from those that prevail in developed countries. The general level of living in our country is so low and the financial markets for housing are so poorly developed that most residential house owners cannot afford to deal frequently in real estate markets for capital gains as they do in developed countries. There is, thus, a need to develop a new economic analysis of housing markets to describe the housing situation in our country.

While economic analysis of the housing market is quite useful to understand the housing situation in India, it has to be supplemented with an understanding of the political, bureaucratic and legislative processes through which housing policies are adopted and executed. Even in a country, such as, the USA, certain housing policies advocated by economists purely on welfare considerations could not be adopted. The non-adoption of these policy measures are at least partly attributable to the lack of adequate political pressure groups or lobbys to push the case for demand management in preference to supply management. Fortunately, the traditional economic reasoning of rational consumer and producer behaviour can be applied to develop an economic analysis of public choice and bureaucracy. Such an analysis would help us to design housing policies that are also politically and administratively feasible.

This paper deals with the role of economic analysis in:

- (i) understanding the working of various segmented housing markets, and
- (ii) understanding the legislative and bureaucratic processes associated with housing policies.

The paper is organised as follows: section 2 gives a picture of the role of housing in the Indian National Five Year Plans. Section 3 deals with certain conceptual and methodological issues related to housing policies in India. Sections 4 and 5 discuss issues related to the demand for housing and supply of housing respectively. The last section, section

6, describes alternate data sources that can provide data needed for economic analysis, and it also contains concluding remarks.

HOUSING AND THE PLANS

The plan expenditures on housing, private sector's investment on housing, and investment in housing as a percentage of total investment in the economy are presented in Table 1 below. It may be noted that investment in housing is growing at a lower pace than the overall growth in total investment of the Indian economy. This is reflected by a declining trend in the investment in housing expressed as a percentage of the total investment. It may also be noted that the public expenditure on housing forms only a small fraction of total investment on housing. During the First Plan period public expenditure on housing was a little over 20 per cent of the total investment on housing, while in the Sixth Plan period it is expected to drop to about 11 per cent.

TABLE 1 PLAN OUTLAYS ON HOUSING

(Rs. in crores)

Item	First Plan	Second Plan	Third Plan	Fourth Plan	Fifth Plan*	Sixth Plan
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Plan expenditure on housing	48	80	110	141	494	N.A
2. Total expenditure on public housing (including serial No. 1 above)	250	300	425	625	1,044	1,491
3. Private sector investment on housing	900	1,000	1,125	2,175	3,636	11,500
4. Total investment on housing (2 plus 3)	1,150	1,300	1,550	2,800	4,680	12,991
5. Total investment in the economy	3,360	6,750	10,400	22,635	45,561	158,710
6. Investment in housing as a percentage of total investment in the economy	34	19	15	12	10	8

*Investment data is for full five-year period though the plan itself was terminated after only 4 years of operation.

SOURCE: National Building Organisation and UN Regional Housing Centre, ESCAP. *Handbook of Housing Statistics*, 1979, p. 62.

The figures in the 7th column are taken from Government of India, Planning Commission, *Sixth Five Year Plan, 1980-85*, January 1982.

Several points should be noted regarding the figures quoted in Table 1. First, the plan outlay and expenditure figures seem to be obtained by adding the annual plan figures for the five years comprising the Five Year Plan. In so doing these expenditure and outlay figures do not take into account year to year changes in price level and the usual procedure of discounting future values, thereby raising conceptual problems in interpreting these numbers. Second, public expenditure on housing reported in the table can at best be an underestimate of the true public expenditure on housing. This is because the plan expenditure refers to what is so reported in the plans. This does not include perhaps all expenditures on housing incurred by various central and state governments and public sector agencies such as, the Railways, Dandakaranya (Rehabilitation) Project, Steel Authority of India, Indian Telephone Industries, etc. Third, the public expenditure on housing includes both investment and operating expenditures and it is difficult to separate the investment part of the public expenditure. There is, therefore, a great need to undertake a detailed and systematic study on constructing a meaningful time series data on private and public expenditures on housing classified into investment and consumption expenditures.

While the figures in Table 1 describe the time trend in public and private sectors' investment on housing and its relation to total investment, it will be useful to know the position of our country relative to other developed and developing countries with regard to the share of housing investment in the Gross Domestic Product and in Gross Domestic Capital Formation. Table 2 expresses investment in residential construction as a percentage of Gross Domestic Product and as a percentage of Gross Domestic Capital Formation for a selected list of countries. The figures reported in the table are averages of these percentages over the period 1970-77. From this table it is quite clear that the relative position of India is rather poor even when compared to the developing or less developed countries such as, Chile, Columbia, Turkey, Ghana, Kenya and the Republic of Korea.¹

Although housing comes under the State list(?) in the Indian constitution the central government took several initiatives to improve the housing conditions in the country. This was done through plan outlays on various social housing schemes. These are administered by the states with financial assistance from the central government and other

¹It is useful to undertake a comparative analysis of trends in housing investment in different countries and relate those trends to changes in the degree of urbanisation, changes in income, employment, and savings, etc. See, for example, Leland S. Burns and Leo Grebler, "Resource Allocation to Housing Investment—A Comparative International Study", *Economic Development and Cultural Change*, Vol. 25, No. 1, October 1975, pp. 96-98.

TABLE 2 INVESTMENT IN RESIDENTIAL HOUSING IN SELECTED COUNTRIES AS A PERCENTAGE OF GDP AND GDCF

Country	Investment in Residential Construction	
	as percentage of GDP	as percentage of GDCF
(1)	(2)	(3)
USA	4.03*	22.99*
UK	3.10*	16.60*
Japan	7.21*	19.99*
Chile	2.82	18.79
Republic of Korea	2.71	10.93
Columbia	3.76	20.01
Turkey	3.97 (3.49)*	22.16 (15.58)*
Ghana	4.76	40.95
Kenya	2.92	15.88
India	2.26*	12.39*

SOURCE: *These figures are derived from the UN Year Book of National Accounts Statistics, 1978 as average percentage figures for 1970-77. The rest of the figures are obtained from Housing Sector Policy Paper of the World Bank.

financial institutions set up by the central government institutions, such as, the Housing and Urban Development Corporation (HUDCO) and the Life Insurance Corporation. It may be noted, however, that from the beginning of the Fourth Plan the central financial assistance has been only in the form of block grants and block loans. Thus, the allocation of public investment funds for housing is determined by a complex system of political and bureaucratic considerations both at the state and central government levels.

The Public Housing Assistance Schemes introduced by the central government through its plans and programmes are:

- (i) Subsidised housing scheme for industrial workers.
- (ii) Subsidised housing scheme for the economically weaker sections².
- (iii) Subsidised housing scheme for plantation workers.
- (iv) Rental housing scheme for government employees.
- (v) Low-income group housing scheme.
- (vi) Middle-income group housing scheme.
- (vii) High-income group housing scheme.
- (viii) Village housing project scheme.

²These two schemes are subsequently merged to constitute the Integrated Subsidised Housing Scheme for Industrial Workers and Economically Weaker Sections,

- (ix) Slum clearance and improvement scheme.
- (x) Provision of house-sites for rural landless workers.
- (xi) Land acquisition and development scheme.

A detailed description of these schemes including the year of introduction, plan outlays on them, the eligibility requirements, etc., can be found in the Report of the Working Group on Housing Finance set up by the Reserve Bank of India.³

Table 3 below gives the number of beneficiaries under several of the public housing assistance (or social housing) schemes. During the Second Five Year Plan the plan outlay on rural housing schemes formed a mere 5 per cent of the total plan outlay. The corresponding figures for the Third Five Year Plan is 13 per cent.⁴ The number of beneficiaries of the

TABLE 3 HOUSEHOLDS BENEFITED FROM VARIOUS SOCIAL HOUSING SCHEMES

<i>Sl. No.</i>	<i>Name of Scheme</i>	<i>Number of Households Benefited</i>
(1)	(2)	(3)
<i>URBAN</i>		
1.	Housing Scheme for Industrial Workers and EWS	1,86,182
2.	LIG Scheme	3,30,834
3.	MIG Scheme	41,950
4.	Rental Housing Scheme for State Government Employees	31,647
5.	Slum Clearance and Improvement Scheme	1,24,317
Total Urban		7,14,930
<i>RURAL</i>		
6.	Subsidised Housing Scheme for Plantation Workers	16,088
7.	Village Housing Projects Scheme	67,083
8.	House Sites to Landless Workers	76,54,409
Total Rural		77,37,580

SOURCE: National Building Organisation and UN Regional Housing Centre, ESCAP, *Handbook of Housing Statistics*, 1979.

³Reserve Bank of India, *Report of the Working Group on Housing Finance*, 1978.

⁴These figures are obtained from *Handbook of Housing Statistics*, 1979 (page 62A) published by the National Building Organisation and the UN Regional Centre, ESCAP,

social housing schemes in the urban sector are about seven lakhs while a similar figure in the rural sector is a mere 83 thousand, excluding the housesites to landless labourers, and about 77 lakhs if the beneficiaries of house sites are also included. These points must be noted carefully as the percentage of urban households to the total number of households is about 20 per cent. It is, therefore, quite clear that the social housing schemes introduced in India have an urban bias, although in the recent years this bias is being reduced. During the Sixth Five Year Plan there is an outlay of Rs. 354 crores under the Minimum Needs Programme to provide house sites and construction assistance to rural landless workers. The plan proposes to provide house sites to 68 lakh households and construction assistance to 36 lakh households.

HOUSING NEEDS AND HOUSING POLICIES: SOME PRAGMATIC ISSUES

Socio-economic Conditions and Welfare Objectives

Even a casual examination of the literature on the socio-economic structure of our country reveals that about 20 to 25 per cent of the population is urban (according to census definition) and that about 75 to 85 per cent of urban households have a monthly income of less than Rs. 500. About 75 to 80 per cent of the population is rural, and about 90 to 95 per cent of the rural households have a monthly income of less than Rs. 500 and that this pattern varies slightly from one region to another within the country.⁵ This socio-economic structure is due to or it is coexistent with the following condition:

- (i) the existence in rural areas of a predominant class of landless agricultural labourers, and cultivators with small and marginal land holdings;
- (ii) seasonal unemployment in rural areas;
- (iii) lack of, or inadequate size of, small-scale rural-based industry;
- (iv) the existence of a predominant class of workers engaged in tertiary or service sector in urban areas;
- (v) increasing urbanisation and migration of workers from rural to urban areas, and
- (vi) increase in population, particularly a greater increase in population in lower-income groups.

When our country has a socio-economic structure as described above

⁵This is only a rough observation based on the information provided by the 1971 census tables, 1981 provisional population totals, and income distribution data provided by the *Report of the Committee on Distribution of Income and Levels of Living*, Planning Commission, Government of India, February 1964. The income distribution is adjusted for price level changes.

our national social welfare objective will be met by:

- (i) increasing the employment possibilities for the unemployed, both in rural and urban areas;
- (ii) increasing the labour productivity and income of persons currently engaged as agricultural labourers in rural areas, and as low-paid service workers in urban areas; and
- (iii) providing direct welfare subsidies to the poor to meet their basic needs such as drinking water, food, health, education, shelter, etc.

While an increase in employment and productivity could result in increasing the income of the poor, such increase in income may not be adequate to meet the basic needs of people. Thus, there is a need for the third approach cited above. It should be noted, however, that the felt needs of the poor and the beneficiaries must be ascertained before offering them direct subsidies for food, education, health, shelter and the like. Otherwise, when there are markets for the goods and services there will be a tendency for the beneficiaries to convert one form of welfare benefit that is less desirable into another form that is more desirable.

Housing Needs

It is the general perception that the demand for certain goods and services such as food, health, education, etc., is more than the 'need' for the upper income groups and that it is less than the 'need' for the lower income group. The notion 'need' here refers to a normatively determined quantity of the goods or service that an individual or a household requires to fulfil a desired basic minimum level of wellbeing. Invariably these normative basic levels such as 2400 calories per day of food are determined on professional and scientific considerations and not on economic considerations. However, as these basic needs depend on the minimum quality of life a society wants for its people, they depend, to a certain degree, on the societal norms for quality of life. And these could vary with income levels and among different societies.

The terms housing demand and housing need are most often used interchangeably. They are also misunderstood and misused. It is, therefore, quite useful to mention the concept 'housing need' as it ought to be and as used in the literature. From public health considerations one can determine the need for the presence of a given type of a latrine, and a source of drinking water. Given the climatic conditions one can determine the type of roof and the type of walls that can provide the inhabitants protection from bad weather and bad climate. Thus, basic minimum needs for certain housing attributes can be determined using considera-

tions similar to those used in determining the basic food needs. This is how one must define the need for shelter.

But the housing need is not the same as shelter need. People need housing not just for shelter. They need it to protect themselves and their belongings from thieves, dacoits, and larcenists. They need it close enough to their place of employment, place of shopping, schools, hospitals, etc. It is not correct, on the one hand, to say that these are not basic housing need requirements and, on the other hand, it is not easy to develop objective criteria for the minimum levels of these requirements. To a certain degree the requirements of these housing attributes depend on the degree of crime and lack of law and order in the community and also on the neighbourhood quality and location. These vary from community to community and place to place. Thus determination of 'housing needs' is a difficult problem and practically very little attempt is made to measure housing need as it ought to be measured.

Housing need is measured differently in practice. It is sometimes assumed that each family needs a house, irrespective of the type of house and its *specific location*. This is, for example, the approach used by Bakshi D. Sinha and C.H. Shah *et. al.*⁶ This is a macro approach where housing requirements for large regions, such as states, are ascertained based on census figures on households add the projection of the number of households for the future years. Another commonly used operational definition of housing need is the community's housing requirement without any reference to the type of house, floor space, neighbourhood, amenities, etc. According to this definition, the estimated housing need only gives a broad picture of the number of dwelling units required without any specific reference to the break-up of such needs by type and means to pay for them. Once housing needs are so estimated one could then examine 'housing deprivation' in terms of: (i) deficient physical structure, (ii) overcrowding, (iii) affordability to pay for the cost of housing, (iv) inadequate housing amenities, and (v) inadequate neighbourhood amenities.⁷

⁶Bakshi D. Sinha, *Housing Growth in India*, Birla Institute of Scientific Research, 1976, and C.H. Shah, S.G. Narayanamurthy, T.R. Gopala Krishnan, and B. Bhaskara Rao, *India in Perspective, Development Issues*, Volume 3, New Delhi, Arnold Heineman, 1978.

⁷This approach is followed by Bernard J. Frieden and Arthur P. Solomon, *The Nation's Housing Needs—1975 to 1985*, Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, Cambridge, Mass., March 1977. Some attempt has been made in India to measure affordability and to assess the housing assistance needed under certain assumptions. See B. Bhaskara Rao, "Housing the Deprived and the Underprivileged", *Long Range Planning*, Vol. 12, No. 1, February 1979.

Consequences of Piece-meal Policies

It is a common practice to consider policies in a piece-meal fashion. Such a procedure would conceal the conflicts that might exist between different social objectives behind such policies. It would also ignore the consequences of one piece-meal policy on the social objective behind another (piece-meal) policy. This point can be illustrated by considering the industrial and housing policies. The industrial licensing policies regarding industrial expansion in the private sector have mostly favoured urban industrial complexes. This has resulted in the emergence and enlargement of large slums due to migration of labour from rural areas and smaller towns into the cities. This is so because the typical arguments of job search literature suggest that the greater the probability of finding a better job in the city, other things remaining the same, the greater would be the probability that one would migrate to the city.

Similarly, the housing policies can have an impact on the supply of industrial labour. Providing better housing facilities through social housing schemes in urban centres reduces the expected personal cost to a potential migrant. Again, the same literature on job search shows that the lower the cost of job search, other things remaining the same, the higher is the probability that a potential migrant would migrate to the urban centre. It is for this reason that Tinbergen advocated a general unified approach to the design of economic policies.⁸

Political and Bureaucratic Considerations in Choosing Housing Policies

An examination of the housing assistance schemes as described above in this paper, reveals the most of these schemes are aimed at the urban poor while some of these are even for people who are not so poor. This must be carefully noted as the urban households form only about 25 to 30 per cent of all households and the non-poor beneficiaries are mostly government employees.

The total number of urban and rural households benefited from the public housing assistance schemes is about 7 lakhs and 77 lakhs respectively, as shown in Table 3. It will be quite interesting to compare this number with the number of urban and rural households who need improvement in housing conditions and who qualify for government help. Unfortunately, such comparisons have been rarely made and they are also difficult to make. However, some preliminary attempt will be made in this paper to place the national housing assistance schemes in their proper perspective.

⁸See Jan Tinbergen, *On the Theory of Economic Policy*, North Holland Publishing Company, 1952, and also by the same author and the same publisher, *Economic Policy: Principles and Design*, 1956.

Assuming that the annual rate of growth in urban and rural households is about one-tenth of rate observed during the decennial period 1961-1971, we observe these growth rates to be 2.83 per cent and 1.35 per cent.⁹ These rates imply that in the year 1971-72 alone the growth in the number of households in urban and rural India are about 5.4 lakhs and 9.3 lakhs respectively. If one further assumes that about 75 per cent¹⁰ of urban households are eligible for EWS scheme, and that about 10 per cent of them have decent housing already and hence do not need government assistance, it follows that about 2.3 lakh urban households are eligible and could have sought government's social housing assistance in the year 1971-72 alone, just from the increased number of urban households. The total demand for EWS housing assistance in urban areas at the beginning of 1971, under the same assumptions as listed above, will be about 128 lakh households. It is this figure that one must compare with 7 lakhs of urban beneficiaries reported in Tables 2.3.

One can make a very conservative estimate that about 20 per cent of the rural households are landless labourers who do not even have land to build their own rural houses.¹¹ Then, as of 1971 the number of households that needed house sites can be placed at 156 lakhs. It is this figure that must be compared with 77 lakhs of rural beneficiaries reported earlier. The difference between the number of actual beneficiaries and the number of eligible households in the urban and rural sectors is quite large, alarming and noteworthy. This gap between the number of eligible households and the number of households benefited poses two questions:

- (i) Why does not the government consider reducing the income limit for eligibility further in order to reduce or eliminate this gap?
- (ii) Why does not the government choose policies that will reduce this gap by providing better employment for the poor both in urban and rural areas?

These questions can be answered only if we examine the political and bureaucratic processes by which housing policies are made and implemented. A modest attempt in this direction will be made below.

⁹These figures are derived from the information provided in Table 1, page 20 of RBI's *Report of the Working Group on Housing Finance*, 1978.

¹⁰This percentage is obtained from Table 6, page 33 of the RBI report, *op. cit.*

¹¹About 97 per cent of the households in rural areas belong to low-income group according to the *Reserve Bank of India Bulletin*, September 1962. Assume further that 20 to 25 per cent of them do not have even a land to build a house.

The Policy Making Process in a Democracy

The rural population is predominantly illiterate, and of low incomes. Furthermore, the rural people are dispersed and stay in human settlements of relatively lower densities compared to towns and cities. The expenditure needs of higher income rural individuals put them in constant and frequent touch with the higher density urban settlements. Similarly, the rural persons endowed with leadership skills, even if they are not rich, establish linkages with more challenging urban environment.

Policy making in a democracy, whether it relates to housing policies or any other policies, depends on the behaviour of suppliers of public goods, viz., the elected political representatives and the executive branch consisting of the government bureaucracy, and the behaviour of the consumers of public goods, viz., those groups of voters who make known their demands for public goods. Voters' demands for public goods will be made known through leaders or spokesmen for different communities. Formation of community organisations to achieve community goals through collective action depends on:

- (i) the perception that community goals can be achieved through collective action;¹²
- (ii) the leadership skills in the community; and
- (iii) non-human resources needed to support such organisations, etc.

Given the socio-economic environment prevailing in rural India described above it is apparent that such community organisations get formed for and by the rich farmers with large land holdings. In rural areas with lower order human settlements and with fewer occupations and fewer people, there can at best be two viable coalitions, one of them being almost always emerging as a winning coalition. These coalitions are the rich farmers with large land holdings and the rest, and the former constitutes the dominant community group that controls the rural 'voting blocks' or the rural groups that demand public goods.

In contrast, in urban areas, with higher order human settlements, with a large number of occupations and with several people, there can be several viable coalitions or community groups—each being a separate 'voting block'. These viable coalitions or voting blocks are formed

¹²Under certain conditions creation of a community organisation itself might pose a threat to those who oppose the goals of such an organisation. And if such persons are powerful politically they will exert countervailing political pressure and stop the formation of such a group or destroy the group through oppressive actions. Thus formation of such a group is not necessarily more beneficial to the group than non-formation of the group.

either by the place and type of work, or by the place and type of residence, or by caste, religion or language. The mere existence of such community groups gives rise to a 'political interest' in such groups. There is, thus, a political demand to consolidate such voting blocks through political organisation. This, perhaps explains why trade unions are formed and how such trade unions are used by the political leaders. Usually the political goods and political promises are packaged together and hence it is difficult to talk about the process of developing housing policies in isolation.

A political party or a politician that is interested in staying in power and coming back to power in the future elections will choose those policies that give small but cognizable benefits to a large number of its voting block clients or constituent groups even at the expense of policies of moderate to sizable benefits to a small number of other groups of voters.¹³ However, in order to finance the political machinery both the political party and the politician need financial resources and such resources cannot be secured from a large number of voters who have very low incomes and who feel that the benefits they receive from public policies are small and insignificant. Such financial help can come only from the rich farmers of the rural areas and the rich businessmen from the urban areas.

Rationality postulate on the part of the contributors to the political parties and to the politicians imply that such contributions are made in good measure only if the persons and organisations making such contributions can expect benefits that far exceed their contributions. Thus, politicians and the political parties might find that they are faced with conflicting goals of pleasing a few rich people who make political contributions and pleasing a large number of poor people who elect them to office. The politicians, therefore, try to choose policies in such a way that those policies that benefit the rich do not cause drastic adverse impact on the poor and *vice versa*.¹⁴

These principles of public choice can be applied to the issues relating

¹³This follows from the rationality postulate where a politician or his party tries to maximize the probability of getting a majority vote through its policies which are constrained by the Government's financial resources. Some of the arguments presented here and elsewhere in this section are borrowed from the literature on the economics of public choice developed by James M. Buchanan. See James M. Buchanan and Gordon Tullock, *Calculus of Consent*, Ann Arbor, Michigan University Press, 1962 and James D. Gwartney, *Economics: Private and Public Choice*, New York, Academic Press, 1976.

¹⁴In reality, it is difficult to choose policies according to this rule as almost all important policies benefit either of these two groups and impose costs on the other in the form of opportunities foregone—as ultimately all policies need resources that are limited. For this reason politicians often conceal from the poor the policies they choose for the rich and publicise a great deal the policies they choose for the poor.

to the choice of housing and other closely related policies in our country. First, refer to the large gap between the households who are eligible to receive government assistance and those who actually receive such assistance. While this gap can be reduced by lowering the income limit for eligibility such a step will not be favoured by the politicians as lowering the eligibility requirement implies reducing the number of potential beneficiaries of the scheme. Second, refer to the number of different public housing assistance schemes, each one having a large gap between the eligible households and the actual beneficiaries. This is again attributable, at least partly, to a desire by the politicians to please larger number of potential beneficiaries. Third, note that most of the government housing schemes are aimed at the urban poor. This is partly because, with increasing number of slums and slum dwellers slum lords have emerged as a political force that politicians cannot ignore. These slum lords or slum leaders control the votes of the slum dwellers.

The urban middle class and the educated elite has also been emerging as a significant 'voting block' and its support for policies is becoming very important. The policies such as slum clearance and housing for the economically weaker sections are, to a certain degree, aimed at receiving sympathetic support from this urban middle class and the educated elite. It may also be stated that most such people and some of the politicians and political leaders push social welfare schemes not so much because the beneficiaries *need* them, but because they take certain amount of satisfaction in doing a social service. The following quotations from Banfield¹⁵ are worth noting:

The doing of good is not so much for the benefit of those to whom the good is done as it is for that of the doers, whose moral faculties are activated and invigorated by the doing of it, and for that of the community the shared values of which are ritually asserted and vindicated by the doing of it. . . .

. . . the reformer wants to improve the situation of the poor, the black, the slum dweller, and so on, not so much to make them better off materially as to make himself and the whole society better off morally.

One may now ask why our government does not reduce the problems of urban housing by reducing the extent of migration to the urban areas and to increase labour productivity in the rural small-scale sector. Policies that are aimed at increasing rural employment are invariably those that develop agro-based industries, cottage industries

¹⁵Edward C. Banfield, *The Unheavenly City*, Little Brown, 1968, pp 250-251.

and small scale industries. Large scale investments to develop such industries through the development of vocational and technical education, on the job training, and other infrastructure can take place only at the expense of reducing investment in the industrial sector or investment in the urban infrastructure. Such policies also reduce the degree of urban migration and associated urban infrastructure problems. But these policies will not be politically feasible as the business and industry groups who make campaign contributions are adversely affected by such policies. Of course, a situation has often been reached where a mix of the two types of policies are chosen—one type benefiting the rural and small scale sectors and another benefiting the urban and industrial sectors. But the mix is rather quite uneven and unfavourable to the rural and small-scale industrial sector.

It has been observed that the social housing assistance schemes do not benefit those for whom they are meant.¹⁶ There seems to be a general feeling that the schemes meant for the EWS do not go to them for two reasons; first, they are more in need of employment and income and hence do not show much interest in the scheme, second, there are certain hidden costs for receiving the benefits and these costs cannot be borne by the EWS. Similarly, it is noted that the true beneficiaries of the LIG scheme are MIGs and the true beneficiaries of the MIG scheme are HIGs and so on. It was also observed in Tamil Nadu and elsewhere that the recipients of the social housing assistance schemes let out the premises to make additional income, and/or sell the premises to make wealth through capital gains. These phenomena occur mainly because of: (i) a significant shortage in the supply of housing stock, (ii) the people are interested in augmenting their income and/or wealth much more than consuming better housing services, and (iii) whatever difference there is between the market value and allotment value is often made good or reduced through long-waits or payment of bribes, etc.

Economic Theory of Bureaucracy

The rational theory of policy making by the political leaders and their parties deals only with policy formulation and adoption (legislative aspects). The execution of policies depend on the working of the executive branch. The executive branch consists of political appointees at the ministerial and sub-ministerial levels, civil servants from the Indian Administrative Service and other State Administrative Services, and civil servants appointed to the Central and State Government Departments. In order to understand how effective the government policies are one must examine how the government bureaucracy works.

¹⁶For example, see Mira Bakhru, *Distribution of Welfare: The People's Housing Scheme in Karnataka*, Indian Institute of Management, Bangalore, 1981. This report also deals with the role of village politics in the distribution of benefits.

A rational theory of bureaucracy can be developed along the lines of developing a rational theory of democracy.¹⁷ Such a theory, to be useful in understanding our country's problems, must take explicit account of the institutional factors that are peculiar to our country, factors such as the possibility of transfer of top level servants: (i) from the centre to state and *vice versa*, (ii) from one department to another, and (iii) from one region to another, and the social acceptance of certain degree of bribery at all levels in the government bureaucracy.

Economic Theories of Regulation and Justice

Social welfare policies of the government have socio-economic and political implications. The introduction of social welfare schemes implies sometimes the bureaucratic regulation of socio-economic behaviour. The degree of success of such schemes depends on the efficacy with which such regulation takes place. Any regulation creates changes in behaviour, some of them being the intended changes while the others are unintended consequences. The extent to which changes are brought would depend to a large extent on the incentive and disincentive aspects of the regulation. The literature of economics of regulation seems to be relevant here.¹⁸ Enforcement of regulations requires the help of a judicial system. Here again some literature on the economics of law enforcement and justice seems to be relevant.¹⁹ Thus, an analysis of the social welfare schemes, (and housing schemes in particular) requires a careful interdisciplinary approach involving economics, sociology, political science, administrative science, and law.

The social housing schemes that are proposed by the government from time to time and the housing policy suggestions made by the professionals can benefit from the following:

- (i) a better understanding of people's preferences between housing and other needs;
- (ii) a better understanding of social and political considerations for the successful adoption and implementation of government policies;
- (iii) a better understanding of the determinants of housing demand;

¹⁷W.A. Niskanen, Jr., *Bureaucracy and Representative Government*, Chicago, Aldine Publishing Co., 1971, and Albert Breton, *The Economic Theory of a Representative Government*, Chicago, Aldine Publishing Company, 1974.

¹⁸Alfred E. Kahn, *The Economics of Regulation*, Vols. I and II, New York, John Wiley and Sons Inc., 1971.

¹⁹See for example, Gary Becker, "Crime and Punishment: An Economic Approach", *Journal of Political Economy*, Vol. 76, 1968, and George J. Stigler, "The Optimum Enforcement of Laws", *Journal of Political Economy*, May-June 1970, pp. 526-536.

- (iv) a better understanding of the determinants of housing supply.

The discussion presented so far centered around (i) and (ii) above. We shall now consider items (iii) and (iv).

FACTORS INFLUENCING THE DEMAND FOR HOUSING

Housing demand refers to the consumption demand of a nondurable housing service rendered by a dwelling unit, its location, and its environment. It also refers to the demand for a consumer durable good—the physical unit called a ‘house’, characterised by its physical, locational, and neighbourhood qualities. When we deal with housing demand in India we must realise that the conventional definition of a dwelling, consisting of a floor, walls, openings, and a roof, must be modified as there are circumstances under which people’s housing needs are met by dwellings that have either only a floor or only a wall or only a roof.

These are different attributes to housing, and demand for housing depends on the demand for these attributes. This approach of consumer demand is due to Lancaster and King.²⁰ The following are various attributes that one may consider:

- (i) a shelter or a roof over the heads;
- (ii) a place to store personal belongings;
- (iii) a place of security for the persons and their belongings;
- (iv) a place where privacy can be secured;
- (v) a place where all members of a family (nuclear or joint families) eat together, stay together, and share togetherness;
- (vi) a place which is a showcase for displaying one’s possessions and tastes;
- (vii) a place having all the characteristics listed above with a specific set of distances from other places with which members of the household have socio-economic and cultural ties;
- (viii) a place with certain neighbourhood characteristics;
- (ix) a place with certain amenities such as space, drinking water, toilet, etc.;
- (x) a place with specific types or qualities of all the attributes listed above (i.e., the quality of all the other attributes is itself an attribute);
- (xi) above all, it is a physical asset.

²⁰K.J. Lancaster, “A New Approach to Consumer Theory,” *Journal of Political Economy*, Vol. 74, April 1966, pp. 132-57, and A.T. King, “The Demand for Housing: A Lancasterian Approach”, in the National Bureau of Economic Research, *Household Production and Consumption*, 1976.

These different attributes are desired by the households for different reasons or to satisfy different felt needs. The felt needs for these attributes depend on the socio-economic characteristics of the household and on the tastes and/or preferences of the household. These, namely, the socio-economic characteristics and tastes or preferences, vary among households. One must understand the felt needs for these various housing attributes before proposing any housing policies. The failure, often reported, of the slum clearance programmes where the slum dwellers are asked to move to better multistoreyed RCC structures built by the government can be traced to the lack of such an understanding, or lack of appreciation, for the demand for these attributes. The failure could be due to lack of facilities for keeping sheep, cattle, and poultry or due to increased distance from the place of work, place of shopping, etc. Above all, these schemes do not seem to take due account of people's relative preferences between food, housing, employment or income, etc.

Any effort to understand the people's preferences for housing and other needs in India must stress the sociological factors. There seems to be segregation in the housing market, both in rural and urban areas. While to a large extent such segmentation seems to be based on economic status, to a certain extent it also seems to be based on housing discrimination by caste. The latter is perhaps more prevalent in rural India. One should also note that the observed segmentation of housing market by economic status is also partly due to historic discrimination by caste. With serious attempts made by the Indian Government to bring about a reverse discrimination in favour of the scheduled castes and scheduled tribes it would be quite interesting to examine if such policies followed during the last thirty five years have improved their housing conditions. The literature on racial discrimination and segmentation of housing market developed in the US might be worth examining before developing an analytic approach to test the hypothesis on segmentation of housing markets in India by caste or by income.²¹

Other sociological aspects that are quite peculiar to the Indian environment are: (i) joint family system where younger families live together with older families, (ii) treatment of housing as a security for old age.²² and (iii) treatment of a house as an asset to be given away to

²¹See Thomas King and Peter Mieszkowski, "Racial Discrimination, Segregation, and the Price of Housing", *Journal of Political Economy*, May-June 1973, pp. 590-606, and John F. Kain and John M. Quigley, *Housing Markets and Racial Discrimination: A Micro-Economic Analysis*, National Bureau of Economic Research, New York, 1975.

²²Without one's own house an elderly person or an elderly couple might find it difficult to rent a place as there would be no regular income or there would be a reduced income during the old age. For a discussion of sociological aspects of housing

a daughter at the time of her wedding, (iv) treatment of a house as an asset to be bequeathed to the next generation etc. It is quite desirable to examine the role of rural to urban migration in: (i) reducing the number of joint families, and (ii) reducing the demand for rural houses and increasing the demand for urban houses. Similarly, it is useful to examine the relation between income, and savings for social security, with particular reference to treating housing as a social security. With the prevailing social customs one might hypothesise, and test such a hypothesis, that households having more female children save more and channel such savings into physical assets such as land and residential buildings.

Factors that Explain Variations in Housing Demand

Housing demand analysis must determine the demand for housing by tenure (for ownership and for rent), by house type, and by location. The factors that affect demand can be classified as: (i) demographic and other sociological factors, and (ii) economic factors. Among the economic factors the most important ones are the occupation, income, savings, and assets. The distribution of these factors in the population determines the distribution of housing demand by tenure, by type of house, and by location. In order to project future housing demand one needs to generate the future scenarios for distribution of these factors, viz., demographic factors, occupation, income, savings, assets, etc.

Housing demand is affected significantly by what households consider to be the optimal fraction of income that can be spent on housing. Since housing concerns the services rendered by a durable good it is the long-term expenditure on housing as a fraction of the household's permanent income that is useful in the analysis. One must, therefore, distinguish between short-term and long-term income elasticities of demand for housing. The fraction of permanent income that a household is willing to spend on housing depends crucially on the ease with which it can convert its permanent income into current expenditure. This depends on the role of the financial institutions and their policies regarding housing finance. Further details on this aspect can be found in the report of the RBI's Working Group on Housing Finance.

It must be noted that there is a close relation between demand for and supply of housing, particularly in rural India. This is because the housing supply, in most cases, is provided by the household that demands housing. There is no builder-developer, as in developed countries, who constructs the houses and sells to the house-owner. Some of the

(Continued from pre page)

the reader may refer to K.R. Unni, "Toward Identifying Areas of Study in Sociological Aspects of Housing", *Indian Review of Management and Future*, No. 3, July-September, 1977, pp. 29-34.

construction inputs, such as purchasing material, supervision of construction work and even part of the construction labour (in rural India) are provided by members of the household. Thus, the traditional theories of producer behaviour under competitive environment do not apply in studying the supply of housing.

Projection of Housing Needs

Housing policies for the future depend crucially on the assessment of future housing demand and future housing supply, both expressed as functions of certain endogenous uncontrollable factors, endogenous controllable factors, and uncontrollable exogenous factors. A simple assessment of housing demand, housing supply, and the gap between them under any given set of assumptions, can only indicate the dimension of the housing problem, but it cannot suggest policy measures. Economic analysis of housing must be integrated with economic policy on housing. Projection of housing needs for the future may be viewed from this perspective.

One method that was used to project housing needs in India for year 2000 was to assume the following:²³

- (i) each family constitutes a household;
- (ii) calculating the number of families as equal to the number of married males or married females;
- (iii) projecting the number of married males (or married females) on the basis of a historically observed relation between this number and males aged 20-49 (or females aged 15-44);
- (iv) exogenously determined demographic projection of the population;
- (v) assuming that the urban to rural trend in the number of households observed between 1951 and 1971 will continue.

The method described above is highly aggregative which considers all urban areas of the country as constituting one housing market and all rural areas as another. Further, it does not distinguish demand for housing by type of housing and by tenure, taking into account the income of the households and their affordability.

This method can be improved in several ways:

- (i) The extent of joint families in rural and urban India may be ascertained along with the reasons, whether economic or sociological or both, for the existence of joint families. Having

²³For details see Part IV 'Housing' in C.H. Shah, *et. al.*, *India in Perspective*, Arnon Heineman, 1978.

ascertained this, the assumption that each family needs a house may be suitably modified to include income and price elasticities of demand for splitting of joint families or non-formation of joint families.

- (ii) One may determine the headship rates and family sizes for male and female headed families for different regions and for different communities, and use these to estimate the number of families.
- (iii) One may determine the pattern of rural to urban migration as a function of urbanisation and industrialisation through the development of econometric models of internal migration.²⁴
- (iv) It is desirable to determine the demand for different types of houses by tenure, and by location.

In order to determine the demand for housing for the future it is desirable to determine such a demand separately for each housing market. This calls for differentiating housing markets by house type and regional location. Such a disaggregated approach requires estimating the demand functions with economic and demographic variables as explanatory variables and the tenure status, and house type as the dependent variables. It also requires forecasting the future pattern of the economic and demographic variables that enter into the demand functions for each 'housing market'. Forecasting future demographic and economic patterns requires detailed models of internal migration and urban growth.²⁵

FACTORS THAT INFLUENCE HOUSING SUPPLY

As explained in the previous section housing is a large unorganised sector in most of the country, except in large cities. As such, most household heads that demand housing as a housing stock for their own use supply their own housing generating their own finances, purchasing material and services of the craftsmen, engineers, and others. Thus, a substantial portion of housing supply is determined by the demand for housing. As can be seen from the previous section demand for housing depends on expected cost of construction. This cost of construction depends on the cost of materials and professional services needed in construction. Thus, both the demand for and supply of housing depend

²⁴For further details of this approach the reader is referred to Michael J. Greenwood, "A Regression Analysis of Migration to Urban Areas of a Less Developed Country: the Case of India", *Journal of Regional Science*, Vol. II, No. 2, 1971, pp.253-262.

²⁵Housing needs estimates developed by Frieden and Solomon, *op. cit.*, generate demand forecasts at disaggregated housing market levels taking into account detailed migration patterns and then aggregate them to get the national totals for the US.

on the cost of building materials and the cost of building labour and other professional services.

Cost of construction also depends on the building technology used. One can reduce the cost of construction and increase both the demand for and supply of housing by introducing low-cost building technologies that use low-cost materials and/or locally available materials. In a traditional and economically backward society, such as ours, people do not adopt new technologies easily. This is because, society has an inertia for changes in its perception of what is good unless there is a very strong case for it. Secondly, a low income society is not prepared to take risk in trying new technologies as it cannot afford to bear the bad consequences. In order that the country adopt *proven* low-cost technologies it is very essential for the policy makers to emphasise the need for extension work aimed at improving the diffusion of such technologies.²⁶

The cost of construction depends on the cost of materials and services and the cost of financing the purchase of materials. Any person that chooses to construct a house, either for self-occupation or as a rental investment, can be expected to compare these costs with the benefits, tenant benefits in the former case and the rental income in the latter. As the cost of scarce materials such as cement, iron and steel, etc., increase, other things remaining constant, the construction costs increase and there will be a drop in construction activity. As the productivity of the construction workers, such as, masons, carpenters, painters, plumbers increases, other things remaining the same, the cost of these services will go down resulting in an increase in the construction activity. As the number of the skilled workers increases in any given local housing market the competition for work will increase and the cost of these services will go down to a competitive level and increase the construction activity. As the cost of financing the building construction decreases, other things remaining the same, there will be an increase in building construction. As the rental income increases, other things remaining the same, there will be an increase in the supply of rental housing units.

The relations described in the previous section identify the factors that affect housing supply and they also indicate the qualitative nature of the influence. These observations are quite naive, but quite often ignored and hence merit a discussion. Further, unless a quantitative assessment is made of the effect of these factors on housing supply it becomes difficult to make right choices between alternative housing policies. Certain policies that suggest themselves for increasing housing supply

²⁶For a discussion of low cost technologies one may refer to the proceedings of the seminar on *Low Cost Housing Technology and Policy*, Asian Institute of Technology, June 1977, and Dinesh Mohan and Narendra Varma, "Standardisation and Housing for the Weaker Sections", *ISI Bulletin*, Vol. 30, No. 11, Nov. 1978, pp. 376-80.

are mentioned below.

An increase in the supply of scarce building materials such as cement and steel would increase housing supply. The reasons behind the regulation of prices of these essential construction materials are not too obvious. While those who can get these materials under regulated prices have cost savings those who have to pay excess in the black market find the cost of construction too high. Thus, controlled prices with little or no improvement in the supply of these materials, relative to the increasing demand for them, can only give rise to a change in income and wealth distribution involving the generation and circulation of black money, and it would not necessarily give rise to an increase in housing supply. The effective price of these controlled essential materials could very well be more than what would have been the free market price (de-control price). In that case the overall effect of price controls could very well be a reduction in housing supply. One must study carefully the effect of price of these materials on the housing supply.

The government must look into the possibility of an economic use of these scarce building materials. Through an education or an extension programme the government should suggest methods of substituting other materials and/or economising on these materials. This can be done by showing, through demonstrations, the benefits and costs of using alternate construction designs and methods. The role of social architecture that emphasises the use of local building materials, as advocated by Laurie Baker, a British architect settled in Trivandrum, seems to be quite important. Such an architectural approach, that would minimise the cost of construction could be formalised and form a part of the regular curriculum in engineering and architecture degree courses. Above all, it seems to deserve popularisation through extension programmes using the government's infrastructure.

Effect of Rent Control on Housing Conditions

The effect of rent control on housing supply is well-known. Its continued existence gives one the impression that there is either a social or political or a bureaucratic support for the legislation. Hence, it is perhaps worthwhile to deal with the topic briefly. Those who are lucky to get housing under rent control, without having to pay a premium for obtaining such a benefit, do receive a benefit. If in the absence of such a legislation these beneficiaries were to pay a much higher market rent, the difference between the market rent and controlled rent can be taken as a rough measure of the benefit.²⁷

²⁷For a fuller description of measuring the costs and benefits of a rent control legislation one may refer to Edgar O. Olsen, "An Econometric Analysis of Rent Control",

In Indian cities the benefits seem to accrue to only a small section of the community. It will be quite interesting to study the occupational and income distribution of the tenants of houses that come under rent control. It will also be interesting to examine, how many houses should come under rent control as per the law, and how many are actually in the rent controller's list. The low historic levels of rent at which the rents are usually frozen by the rent controllers and the courts give rise to an intensive demand for corruption, whereby the owner of a house that should come under the rent control is motivated to bribe the respective officials not to list the house. The present discounted value of the differential between the market rent and the control rent could be so large that both the home-owner and the official can share even a portion of this value at the expense of depriving a potential tenant his benefit. This cost of keeping a house outside the rent controller's list and the potential hazard of a new tenant bringing the house under rent control forces the owner to ask for a large deposit as a condition for renting. This has the undesirable effect of raising the effective market rent. When there is a rent control law that is quite difficult or unrealistic to enforce, it will give rise to an undesirable effect of increasing the effective free market rent, as such rent must now include the cost of law evasion.

The arguments cited in the previous paragraph are based on the assumption that the rent control law either does not affect the housing supply or it reduces the housing supply. To the extent the rent control law reduces the housing supply the adverse effect of the law on the effective market rent a tenant has to pay is much more than what was suggested in the previous paragraph. The existence of rent control law implies that either the present value of future streams of rent are low, if the unit goes under rent control, or there is a cost of keeping the unit outside the rent controller's list. In either case the expected 'net benefit' to an investor in rental housing will be lower under the rent control legislation than under no such legislation. It can, therefore, be expected that the rent control legislation, all other things remaining the same, reduces housing supply.

The ultimate overall effect of rent control law must be assessed in terms of the distribution of tenant and owner benefits under the two regimes, one with the rent control law and one without it. But such an

(Continued from pre page)

Journal of Political Economy, Vol. 80, No. 6, Nov-Dec. 1972, pp. 1081-1100, and Joseph De Salvo, "Reforming Rent Control in New York City: An Analysis of Housing Expenditures and Market Rentals", *Regional Science Association Papers*, Vol. 27, 1971, pp. 195-227. For a discussion of the rent control topic in Indian context the reader is referred to Abhijit Datta, "Rent Control and Low Income Housing", *Economic and Political Weekly*, 13 May 1972, and Deena Kathkate, "Rent Control in Urban Areas: An Alternative", *Economic and Political Weekly*, Vol. 10, Special Number, February 1975.

analysis requires the development of a detailed urban rental housing market with different degrees of effective use of rent control legislation. Such an exercise seems to be most important in developing urban housing policies in India. The following three policies, at least, merit a systematic analysis using an econometric model of an urban housing market:

- (i) keeping the present rent control legislation;
- (ii) modifying the legislation to allow updating of rents periodically after monitoring the trends in market rents;
- (iii) repealing the legislation and introducing in its place a subsidised rental housing scheme where the government pays the beneficiaries the difference between the free market rent and a welfare rent. The welfare rent may depend on the income, household size, social status, etc. The finances for the subsidies can be generated at least partly by introducing a floor space tax on all housing units that are rented and by imposing a housing tax on all employers who do not provide free or subsidised housing to their employees. This tax may be a particular percentage of the wage bill of the employers.

The free market rent, for calculation of the subsidy, could be based on an econometric rent equation to be determined periodically. This equation would show rent as a function of physical characteristics, location, housing and neighbourhood amenities.²⁸

OTHER CONSIDERATIONS IN HOUSING SUPPLY

Housing supply is determined by people's preferences for different types of constructions with different degrees of durability. A given durability of a building implies an associated demand for replacement investment. A building that lasts 100 years requires a replacement after 100 years. If the building costs have an increasing trend while people's incomes do not increase proportionately, other things remaining the same, people prefer more durable housing. In addition, when there is no social security people prefer to have a long lasting residential structure. The greater the durability of a good, the less is the replacement investment in any given year. These considerations give an explanation for the choice of traditional urban structures with brick, cement and RCC that have a long durability. One must examine carefully the desirability

²⁸For a particular specification of such a rent equation for Indian cities one may refer to "Rent Comparisons", Chapter 9 in Irving B. Kravis, *et. al. A System of International Comparisons of Gross Product and Purchasing Power*, Baltimore, Johns Hopkins University Press, 1975.

of reducing both the durability and the cost of residential construction. Such a step would generate more residential construction and consequently more employment in the construction industry.

Sometimes the preference for a strong and durable structure is due to the desire to have good security for the residents and their personal wealth. If the level of urban crime can be reduced to a minimum, if the law enforcement is more dependable, and if there are better and accessible general property insurance schemes, then the people's preferences would shift to less durable and less costly residential structures. This is an instance where the neighbourhood amenities can be substituted for certain attributes of housing quality.

Construction of a residential building requires a land over which such a structure can be built. Cost of land happens to be a significant component of construction cost of a residential unit in urban areas. In a country with increasing urbanisation the land values in urban areas increase much faster than the general price level. As such, the share of cost of urban land in the total cost of a residential house will tend to grow over time. This would give rise to a speculation in vacant land values resulting in holding of vacant land. Taxation of vacant urban land or social control of urban land unaccompanied by appropriate measures to reduce the demand for urban land and to increase the supply of housing, transport, and other infrastructure facilities can only bring about a greater scarcity in land and push the real land values up. Such partial measures, instead of reducing speculation in land values can only increase it.

It must be recognised that increasing industrialisation and urbanisation can only increase the value of a scarce, immovable and fixed amount of urban land that enjoys certain locational advantages. If industrialisation and urbanisation, that seem to go hand in hand, are allowed to take place, one must live with the fact that urban land values would increase and cost of urban housing would also increase. As urbanisation continues more and more peripheral land would be brought under residential and industrial use creating additional demand for power, water, sewerage, health, education, law enforcement, and transportation services. The important question to ask that is if the aggregate economic benefits of industrialisation under agglomeration economies to a region exceed the aggregate social costs imposed by increasing demands on all infrastructural facilities. Urban housing is just one such problem in urban infrastructure.

One way to reduce the problem of urban housing is to reduce the degree of urbanisation or to decentralise or disperse the economic activities. It seems that if the economic activity were to be left to operate through private economic motives one new city may be added on to an existing city in slow and gradual steps. This is because locational

decisions of new industrial and commercial activities are based on existing infrastructural facilities. If economic activities in space and time were to be properly planned one may allow a small town to develop into a larger city instead of increasing the scale of an already existing city. This can be achieved through provision of the necessary infrastructure and possibly by even providing an excess capacity for such infrastructure to promote growth. These ideas have been expressed in the regional economic development literature by Hirschman, Myrdal, and Perroux.²⁹

The factors that affect housing supply described above can be classified as: (i) factors that affect the cost of housing materials through government's pricing policies, (ii) factors that affect the cost of land through government's policies on urban development, (iii) factors that affect the cost of construction through government's lending policies, and (iv) factors that affect the rate of return to housing investment through government's rent control policies, etc. It may be noted that housing supply is of three types: (i) supply by the public sector through its schemes such as EWS, LIG, MIG, HIG, etc. (ii) supply by the building industry for the owners of dwelling units, and (iii) supply by the households themselves through construction of houses for own occupation. The factors described above affect these three types of suppliers differently. The economic analysis must distinguish the different effects of public policies on these three types of suppliers of housing.

CONCLUDING REMARKS

Economic analysis of housing situation is possible only if the appropriate data is available to make the statistical inferences. For studies on urban housing³⁰ one may use the data collected in 1969 by the Labour Bureau for its study on middle-class consumer price index.³¹ One may also use the data collected in the Bangalore survey (1974)³².

The best data for analysis of housing demand both for rural and urban households is the National Sample Survey data of the 28th round (October 1973-June 1974). This will provide data on 1.4 lakh rural households and 79 thousand urban households.³³ There is, thus so much

²⁹For further details on this topic the reader may refer to VLS Prakasa Rao, *Central Place Theory in Retrospect and Prospect*, Indian Institute of Management, Bangalore, 1981 (mimeographed).

³⁰For a detailed econometric model of an urban housing market the reader is referred to Mahlon Stratzheim, *An Econometric Analysis of the Urban Housing Market*, New York, National Bureau of Economic Research, 1975.

³¹The Labour Bureau data was used by Irving Kravis *et. al.*, *op. cit.*

³²V.L.S. Prakasa Rao and V.K. Tewari, *The Structure of an Indian Metropolis, A Study of Bangalore*, Allied Publishers, 1979.

³³Further details on this data can be obtained from a special issue of the Official Journal of NSSO, *Sarvekshana*, June 1977.

data collected on housing that as the first item of agenda for research on economics of housing, one must conduct an econometric analysis of housing demand with the existing data sources.

This paper did not discuss certain conceptual, theoretical and policy issues that surfaced recently in the US literature on the economics of housing. For example, the benefits of social housing schemes are currently measured in India in terms of the number of beneficiaries, number of units constructed or the amount of expenditure on these schemes. There is some recent literature on measuring the welfare benefits using the notion of consumer surplus.³¹ □

³¹See Joseph S. De Salvo, "A Methodology for Evaluating Housing Programs," *Journal of Regional Science*, Vol. 11, No. 2, 1971, pp. 73-185; and Michael P. Murray, "The Distribution of Tenant Benefits in Public Housing", *Econometrica*, Vol. 43, 1975, pp 771-881; and Clark C. Abt, *The Evaluation of Social Programmes*, Sage Publications Inc, Beverley Hills, California, 1976.

*The Extent of Housing Improvement in a Squatter Upgrading Project**

EMMANUEL JIMENEZ

INTERNATIONAL DEVELOPMENT agencies such as the World Bank and the United States Agency for International Development (AID) have invested well over a billion and a half dollars in less than ten years to implement housing projects in which the beneficiaries, most of whom were originally squatters, exercise substantial direct control over the amount of housing services they consume (Grimes, 1976; World Bank, 1980). These self-help housing projects have generally been of two main types: slum upgrading, in which basic urban services are provided to existing low income communities with little or no displacement of the population; and sites and services in which land owned, purchased or expropriated by the government is subdivided, serviced and allocated to applicant families according to income and other criteria. The services provided include, among others, access to water, sewerage systems, health facilities and proper road networks. Most projects also attempt to provide greater security of tenure since many beneficiaries were previously squatters. With regard to development beyond these basic services, the key assumption is that participating households are expected to make any structural improvements to their dwellings at a pace and with methods dictated by their own tastes and resources.

Even with accelerating rates of project development,¹ the efficiency and effectiveness of these types of projects in providing adequate shelter has only recently begun to be researched and documented by the academic community. Burns and Shoup, for example, study the effects of resident control and ownership in Salvadorean sites and services

*This paper synthesises the main results of a lengthier and more technical paper by the author (see Jimenez, 1981). The author wishes to acknowledge the Research and Analysis Division (RAD) of the National Housing Authority (Philippines) and the World Bank for providing the data, and Serena Ng for excellent research assistance. The contents of this paper represent the views of the author alone and not of the World Bank or any other institution mentioned above.

¹The World Bank (1980), for example, estimates that, from 1974 to 1983, some 90 more of these projects will be implemented by that agency alone.

projects. They conclude, using evidence from survey data, that a greater degree of security of tenure results in more households undertaking some improvement. However, the crucial question of *how much* housing quality has changed—the magnitude of the improvement—has yet to be addressed. The fact that a household has done some improvement to its house still does not mean that the net effect of a project on housing quality is positive—because of depreciation as a house ages during implementation, or in the case of upgrading, because project implementation has done some damage to the house (as sanitary facilities are installed or as a project area is rendered less dense). At the aggregate project level, the net effect on the average housing quality also remains to be established. While visual evidence exists that some houses have (on net) improved dramatically, some have obviously not changed or even declined in quality. One of the primary objectives of this paper is to provide a summary measure of the extent of the net improvement in housing quality. Data from a slum upgrading project of the largest squatter community in Manila—the Tondo Foreshore—will be used in a hedonic price approach to measuring changes on quality.² This data base is singularly appropriate for this study because it contains panel (before and after) information on both housing as well as household characteristics, including a measure of value in the first period. The other objective of this paper is to attempt to provide an explanation for this improvement, since there appears to be a great deal of variation in the amount of upgrading being carried out across households.

THE SETTING AND METHODOLOGY

The aim of the Tondo Urban Development Project is to incorporate what was then Manila's (and the Philippines') largest agglomeration of squatters³ into a viable legalised community, with access to all the basic

²It should be noted that measuring the extent of *improvement* in a slum upgrading projects would be a different matter than estimating the extent of house *building* in a sites and services project. In the former, households have an existing stock which would be displaced by the provision of services but only in a small way. In the latter, households build from a basic core and would really need a substantial bit of work to make the unit habitable.

³The Tondo's long and troubled history has been well documented (see Laquian 1971) as successive governments attempted to grapple with the squatters and their dwellings, long considered to be eyesores and the breeding grounds for social and political dissent. While the government lacked the political clout to evict the squatters, it was not until the mid-1970's that a coherent and comprehensive policy was formed to rationalise the land tenure system in the area without massive relocation to peripheral areas—which had been the unfortunate and largely unsuccessful predecessor of this policy for dealing with squatters. This new policy was transformed into the First Manila Urban Development Project with World Bank financial support.

urban services.⁴ This slum upgrading project was begun in mid-1975 and is expected to be completed by the end of 1981. It affects 27,500 households (180,000 individuals) living in 16,500 structures located over 137 hectares of prime urban government-owned land in Manila's port area. The average household income in the area is approximately 77 per cent of the median incomes in Metro Manila (see Lindauer, forthcoming, for a strict comparison). Most income is earned in the form of wage income. The demographic characteristics are similar to those for Metro Manila (Lindauer).

The project has been implemented through a comprehensive system called 'reblocking'. Before any construction was started, the entire area was divided into about 170 blocks. The residents of each block had to choose (by ballot) among a number of lot configurations drawn up by government architects. These site plans were designed to minimise dislocation and yet to rearrange the existing dwellings to conform to more or less regularised lot lines so that each dwelling would have access to a communal roadway or footpath and to the main water and sewer lines. In practice the number of extensive dislocations were small.⁵

One of the main objectives of this paper is to obtain a summary statistical measure of the amount of upgrading which has taken place in this self-help housing project. An obvious candidate in the investment expenditure of households. A large problem with such a measure would be that amounts spent to buy materials or hire labour would be a gross underestimate of the amount of investment in a self-help upgrading project of a squatter community. Much of the labour is not bought and comes either in the form of the owner occupier's own 'sweat equity' (own labour invested in the house) or is donated by relatives, friends, and neighbours (for which payment may or may not be made in kind). Similarly, the amount of materials bought would not take into account the considerable amount of salvage scrap, which is frequently used in these dwellings ingeniously. So, in this paper we attempt to get an estimate of the net real change in a particular index of housing quantity and quality.

A reasonable alternative would be to compare the average housing values before and after project implementation. Thus, if $V^1 \equiv$ the actual value of the house before the project and $V^2 \equiv$ estimated value after the

⁴The project components are described in detail in NHA (1980). They include the provision of individual water connections, road access, sewerage systems, support for community and health facilities and tenure. The project was expected to pay for itself through amortised development charges and a subsidised price for the prime urban land.

⁵The most common method of moving the dwelling unit was through community action—physically carrying the structure over a short distance by friends and neighbours.

project, then a possible measure would be:

$$1. \Delta H = V^2 - V^1.$$

An obvious limitation of this statistic is that the change in value might not be the result of changes in housing quantity or quality but might be the result of changes in prices. Another is that it is frequently difficult to obtain consistent estimates of value in two periods unless the same person performs both appraisals. For ordinary commodities, controlling for price changes is a fairly straightforward exercise. However, because housing is an indivisible commodity whose characteristics are not uniform across units, obtaining a unit price index requires considerably more thought. In order to surmount these difficulties, this paper employs the hedonic price technique to obtain a price-consistent measure of changes in housing quality. We now describe this method in greater detail.

Like most durable goods, housing is difficult to measure. It is not easy to determine 'how much' housing one household is consuming versus another. Housing units are different from one another in terms of characteristics. Not only are they of different sizes and shapes (quantity) but they also vary with respect to their structural conditions and the materials used to build them (quality), the availability of services, and location. It is thus not possible to presume that we can obtain unit prices of housing services. However, we can presume that the values of housing units reflect the characteristics of the house. After all, the price or value of a house should be nothing more than the sum of the value of its constituent parts. A crucial question would then be: how housing characteristics determine the value of the house? How much would another room versus the availability of sanitary facilities contribute? The hedonic price method purports to answer this. This technique essentially dissects the rent or value of a unit into a number of components which can be individually measured and compared, such as, the number of rooms in a dwelling, the presence of a bath, the age of the unit, and the quality of the materials used in construction, among others. Prices are estimated for each of these components *via* multivariate regression. These prices can then be used to compute a standardised measure of housing quality. The measure, for any housing unit, is simply a weighted average of the components embodied in the unit, where the weights are the estimated price of the components.

The hedonic method is based upon important assumptions. The first, and least controversial, assumption is that a house is a bundle of size, quality and location characteristics. An analogy can be made to a bundle of groceries. Some grocery bundles are bigger and better than others, depending upon the number and types of food items in the

bundle. So too with housing. A house embodies many features: bedrooms, baths, location, etc. The number and types of features embodied in a particular house distinguish it from other houses.

How can housing bundles be compared? It is simple to compare houses which contain the same number and type of all features except one; for example, a two-bedroom house contains more housing than an otherwise identical one-bedroom unit. Problems occur when units differ in more than one attribute at a time. For example, does a two-bedroom unit with a large yard represent more housing than a one-bedroom house with a small yard? It depends, of course, on the value of the yard space relative to a bedroom. The problem is easily solved in the grocery bundle example because all individual items have clearly marked prices. The more expensive bundle clearly represents *more* groceries. This follows because the money used to buy the expensive bundle could be used to buy the less expensive bundle and there would still be money left over to buy more groceries.

Unlike groceries, prices of the individual features which comprise a housing bundle are not directly observable. This is where the second assumption comes in. The second assumption is that the rent or value of a housing unit stems from the quantity and type of characteristics it contains, and that the 'prices' of the characteristics can be estimated from the rents or values of many units via multivariate regression analysis. A simple example which demonstrates the reasonableness of this assumption concerns the difference in values between two units which differ only with respect to the type of cooling system. If one unit has a central air conditioning system and the other has a system of overhead fans, then the difference in the market value of the two units will equal the market valuation of a central air conditioning system relative to a fan. Not all examples are so simple, but by pooling together many dwellings it is possible for multivariate regression to determine the relationship between rents and dwelling attributes. The result of the regressions is a set of implicit prices which measure the value of each dwelling and neighbourhood attribute. For example, the regressions might determine that a central air conditioning system adds one thousand pesos, or 10 per cent, the value of a house.

The basic premise of hedonic price analysis, then is that there exists a reasonable well-fitting relationship between the prices of the good in question and the characteristics of that good (see Griliches, 1971). In the most general functional form, this relationship can be represented as:

$$2. V=f(C_1, C_2, \dots, C_N)$$

where V is the price (or value) of the house (expenditures on a housing

unit) and the C 's are the characteristics of the house (number of rooms, lot size, etc.) The exact relationship between the characteristics of housing and the price is not known. We assume that this relationship can be expressed in the linear form:

$$3. V = p_0 + p_1 C_1 + p_2 C_2 + \dots + p_n C_n + \text{error terms.}$$

This equation can then be estimated using linear regression analysis.⁶ The coefficients of the characteristics can be interpreted as the shadow price of that characteristic (Rosen, 1974). For example, if C_1 denotes the number of rooms, p_1 would measure the contribution of an additional room to the total price (or value) of the house.

The hedonic equation will be most useful in evaluating the changes in housing quality over time. The data base (described below) provides information on housing characteristics in two time periods: one observation before the structure was affected by the reblocking effort, and another observation six months after a particular structure was affected. The first task would be to use the first period data (which also contains information on the estimated value of the house) to estimate a hedonic equation of the form:

$$4. \bar{V}^1 = \bar{p}_0^1 + p_1^1 C_1^1 + \bar{p}_2^1 C_2^1 + \dots + \bar{p}_n^1 C_n^1,$$

where the superscripts indicate that we are in the initial period. We postulate that the p_i 's estimate the market prices of the i^{th} characteristic. We use [4] to generate \bar{V}^1 , which is the estimated value of a dwelling in the initial period and which was subsequently affected by reblocking.

In the second period, the actual housing value would be V^2 , which is not known. Also, \bar{V}^1 would not be strictly comparable with V^2 as a measure of quality change since attribute prices may have changed in the meantime. However, if we substitute the estimated hedonic coefficients from [4] into an equation using characteristics in the second period, we should be able to get an estimate of V^2 in terms of the initial period prices:

$$5. \bar{V}^2 = \bar{p}_0^1 + \bar{p}_1^1 C_1^2 + \bar{p}_2^1 C_2^2 + \dots + \bar{p}_n^1 C_n^2.$$

The change in housing quality could then be estimated as $\Delta H = \bar{V}^2 - \bar{V}^1$.

THE DATA AND ESTIMATES OF HOME IMPROVEMENT

Part of the data base used in the analysis is based on the house

⁶ Assume that the errors are randomly distributed and are not correlated with one another. In Jimenez (1981), linearities are introduced into the specification to test the robustness of the results.

consolidation survey collected by the Research and Analysis Division (RAD) of the Philippines National Housing Authority, the main implementing agency of the project.⁷ As part of its effort to monitor the project's impact on the beneficiaries, RAD had randomly selected 2000 Tondo households who were interviewed yearly from 1978 to 1981 regarding their socio-economic characteristics. A small subsample was then drawn randomly from this sample and very detailed housing quality characteristics were collected twice—once in 1978 and another time three months after they were affected by reblocking. The only variable which was only collected once (in 1978) was of the dwelling unit. For this subsample of 55 households, the housing and household characteristics files were merged to form the data base used in this analysis.

The uniqueness and richness of this data base more than compensate for the obvious limitations imposed by the small sample size. First of all, two useful measures of housing value were collected—a valuation by the owner of the structure and another by a trained appraiser. These two valuations will serve as a check on one another. Secondly, the panel nature of the data enables us to obtain housing quality data over time rather than relying on recall about investment. Thirdly, the data base on the housing quality variable is very detailed and makes it unique in studies of squatter communities.

Table 1 summarises the variables on housing characteristics used in this analysis. For each variable the mean value of the variable in 1978, before any reblocking took place, is presented along with the mean value after reblocking. A comparison of these figures indicates that, by most measures, there has been an improvement in the average quality of the houses after the reblocking. The most striking differences are in the greater proportion of dwelling units with solid walls and concrete foundations. However, it is difficult to infer, simply from this table, whether the measured differences are significant and how they add to affect the total value of the house.⁸ Moreover, the average values of two variables which may have an importance on house values have declined. Lot sizes, on average, have declined 13 per cent and the proportion of dwelling units with exterior wall finish has fallen 17 per cent. Added to this is the fact that structures have aged. The net effect on overall housing quality thus cannot be generally inferred simply by looking at these average values.

⁷This is part of a larger research effort, sponsored jointly by the World Bank and the International Development Research Centre (IDRC) of Canada to measure the impact of these urban development projects on health, demographic and other socio-economic variables of the population they serve. The discussion in this section is taken from Jimenez (1981).

⁸Aside from SOLIDF and CEMENT, the percentage rates of change for the other housing characteristics range from—17 per cent to 50 per cent.

TABLE 1 HOUSING CHARACTERISTICS

<i>Variable</i>	<i>Description</i>	<i>Mean Before Reblocking for Affected Sample</i>	<i>Mean After Re- blocking for Affec- ted Sample</i>
IOT	Average lot size (sq.m.)	66.178 (8.105)	57.575 (2.548)
STORY	Average number of floors	1.490 (.071)	1.667 (.067)
CEMENT	Proportion of dwellings with solid (cement or brick) walls	.294 (.064)	.569 (.070)
FINISH	Proportion of dwellings with wall finish (e.g., paint)	.118 (.046)	.098 (.042)
SOLIDF	Proportion of dwellings with concrete foundations	.118 (.046)	.294 (.064)
TOILET	Proportion of dwellings with bucket-flushed or other water sealed toilet	.431 (.070)	.647 (.068)
WATER	Proportion of dwellings with sink and water connection installed	.196 (.056)	.255 (.062)
AGE	Average age of the structure in years	11.431 (1.054)	13.235 (1.064)
NPOOR	Proportion of dwellings in neighbourhoods (superblocks) with monthly average incomes above 850 pesos in 1978	.196 (.056)	.196 (.056)
OWNRVAL	Average of owner's actual valuation of the structure (in pesos)	14,137.25	No actual data
CONSVAL	Average of appraiser's actual valuation of the structure (in pesos)	15,773.76	No actual data

NOTE: In 1978, one U.S. dollar was approximately equal to seven Philippine pesos. All figures in parenthesis are standard deviations.

SOURCE: Jimenez (1981).

As discussed in Section II, a price consistent measure of changes in housing quality can be developed using hedonic price estimation techniques. The resulting coefficients of the hedonic equation can be interpreted as the marginal prices of the characteristics and can then be used to predict an estimated housing value after reblocking. The predicted values for before and after can then be compared.

The estimates of the coefficients of the estimation of the determinants of housing value are presented in Table 2. Two dependent variables were used in the analysis—the appraisal of the owners and that of

TABLE 2 DETERMINANTS OF DWELLING VALUE IN THE TONDO, 1978

	Dependent Variables	
	Consval	Ownrval
CONSTANT	-2246.59 (10898.58)	2023.68 (10345.25)
AGE	-1098.16 (1488.88)	-587.23 (1413.29)
AGE ²	35.994 (48.55)	29.259 (46.08)
QSTRUCT	2561.74* (2112.64)	1610.30 (2005.38)
CEMENT	11660.95** (6074.20)	12719.83*** (6335.35)
SOLIDF	10385.17* (6798.21)	6296.64 (6453.06)
FINISH	28019.19*** (6938.55)	-293.73 (6586.28)
WATER	339.94 (6385.90)	-3092.13 (6061.69)
TOILET	1731.78 (4729.81)	3748.01 (4489.68)
LOT	9.690*** (3.642)	1.846 (3.457)
STORY	4497.19* (4056.46)	3753.90 (3850.52)
NPOOR	4136.69* (4093.57)	2300.78 (3885.73)
R ²	.77	.56
F	12.128	4.539
N. of Observations	51	51

NOTE: *Standard error <coefficient.

**Significant at 10 per cent.

***Significant at 5 per cent.

Standard errors are given in parentheses.

SOURCE: Jimenez (1981).

professional appraisers.⁹ There are four groups of independent variables in Table 2. The first six variables measure the structural quality of the dwelling unit. The next two, WATER and TOILET, represent the services available. The following two, LOT and STORY measure the size of the unit and the last variable measures neighbourhood effects. As the exact formulation of these equations has been discussed elsewhere (Jimenez,

⁹Jimenez (forthcoming) compares the use of these two types of measures in determining housing value in a more detailed study.

forthcoming), we will not go into detail concerning their specifications. We note that the signs of the variables are those we would generally expect. Among the variables which represent structural quality, the presence of a solid foundation appears to contribute most to housing value. Age, as one might expect, is negatively related to value but at a decreasing rate. In fact the age elasticity of value evaluated at the mean is positive. This is most likely a reflection of the fact that older dwellings may be associated with greater security of tenure and would lead to a dampening of age's negative impact. QSTRUCT is an index which summarises the interviewer's assessment of the condition of the structure. (This is important because, for example, a dwelling with a deteriorating brick wall would most likely have a lower value, *ceteris paribus*, than a dwelling with wood walls, which were well maintained.) Its sign is positive and significant. In general, the coefficients do not appear to be sensitive to the dependent variable used, except for FINISH. Exterior wall finish has a large positive and significant effect on the appraiser's valuation but negative and insignificant for owners. This divergence is probably due to a difference in taste between the professional appraiser and the squatter. The variables which represent services available, size and neighbourhood effects also have the expected signs, except for WATER, which has an insignificant coefficient.

These coefficients are used to obtain predicted housing values after reblocking by using the 'after' characteristics. The hedonic coefficients, of course, serve as weights. The size of the standard error relative to the magnitude of some of the coefficients are not particularly worrisome because the results are robust across specifications (see Jimenez, 1981, for alternate specifications) and different measures of the dependent variables. The results are summarised in Table 3. Based on the estimated values of housing (calculated using the hedonic prices of Table 2 and the before and after reblocking housing characteristics of Table 1), after only three months, overall housing quality in Tondo has increased by 30 per cent to 44 per cent. The monetary value of the absolute difference in housing quality before and after reblocking ranges from about 4,200 to over 6,200 in 1978 pesos (approximately U.S. \$600 to 886). While the data base does not allow us to ascribe all of these increases to the tenure effect provided by the project, the changes certainly seem dramatic, especially in comparison to other estimates of changes in the average values of housing in developing countries. For example, Strassmann (1981) estimates that for Cartagena, Colombia, between 1973 and 1978, *nominal* housing values increased by 8.5 per cent. We have estimated *real* changes which are considerably greater. We conclude that a significant portion of these changes are project-induced. It is thus apparent that, at least for this sample, the Tondo project has been successful in stimulating housing investment and, more importantly, this

TABLE 3 ESTIMATED AVERAGE VALUES BEFORE AND AFTER REBLOCKING

	<i>Dependent Variable of Hedonic Equation</i>	
	<i>Ownrval</i>	<i>Consval</i>
1. Actual Mean Value Before Reblocking (pesos)	14,137.25	15,773.76
2. Estimated Mean Value ^a (pesos)		
(a) Before Reblocking	14,136.67	15,773.29
(b) After Reblocking	20,360.82	20,558.06
3. Difference Between Before and After (pesos)		
(2b)—(2a)	6,224.15	4,784.76
4. Difference as per cent of Before Reblocking		
(3a)/(2a)	.4402	.3033

^aGenerated from equations estimated in Table 2.

investment has been effective in raising overall dwelling unit quality in the area by a substantial magnitude in a short space of time.

The other goal of this paper is to attempt to explain the determinants of home improvement. Where there is considerable evidence that security of tenure is a primary factor in stimulating housing improvement (Burns and Shoup, 1981), it is also apparent that, given a certain tenure status, there appears to be a great deal of variation in the amount of upgrading being carried out across households. Knowing what explains this variation is particularly important to policy makers and project evaluators if they, for example, need to predict the magnitude of the change in housing quality in order to assess overall project benefits.

Jimenez (1981) develops a model which attempts to derive the variables which have the most impact on housing improvement from a utility maximizing framework. The derivation of the model is not presented here but it can be shown that the amount of improvement desired by households can be described by the following equation:

$$6. \Delta H = f(W, \bar{H}, \mu, D, \Sigma; p_1, p_2)$$

where W represents the expected present value of (permanent) income, D are demographic variables which determine housing demand, μ is a conversion factor which measures a household's ability to transform housing

stock into consumable flows, and Σ represents a vector of variables which are known to the owner-occupier but not to the researcher. The variables to the right of the semicolon which represent prices of materials needed for construction and the overall price level, are not expected to vary across observations. We would, of course, expect total income to have a positive effect on housing improvement if housing is normal. Prices would have a negative impact. The initial physical condition of an individual structure should affect the amount by which it is upgraded in a straightforward way. The worse is the initial condition (due, say, to differing expectations among otherwise similar families regarding the probability of eviction of moving costs) the further (*ceteris paribus*) would the structure's stock be below the utility maximising level. This would lead to increased demand for upgrading upon the provision of tenure once the project is implemented.

Two measures of housing improvement are used for the dependent variable—one for the predicted differences in the owners' valuations (OWNDIF) and another for the predicted differences in the appraiser's valuations (CONSDIF). These predictions are based on the linear specifications of the hedonic equations. For the independent variables, it is assumed that unit housing prices do not vary across the observations, which is reasonable given the fact that the sample is relatively homogeneous and is concentrated in a relatively small area of the city. We also assume that households have the same rate of discount. The choice of an appropriate measure expected permanent income was limited by the availability of data. We follow Follain *et al*, 1981, in assuming that, if permanent income is proportional to expenditures under the permanent income hypothesis, then expenditures can be used as a proxy (PERMINC). The housing consumption efficiency parameter, μ , is proxied by demographic variables. The parameter expected to vary across households depending upon variables such as family size, age of head, whether household members are 'handy' around the house and so forth. The initial housing value, \bar{H} , is measured by OWNVAL and CONVAL. To circumvent a possible problem of spurious correlation caused by the fact that the dependent variable of the estimate of (14) are generated from predicted values of \bar{H} , we use OWNVAL for the equation in which CONSDIF is the dependent variable and CONVAL when OWNDIF is the dependent variable. We note that we control for differences in the time that households are effected by reblocking by including MONTHS. We use a linear equation since the general theory does not impose any set functional form.

The results of the estimation are presented in Table 4 and reveal that the signs of the coefficients are in accord with our *a priori* expectations. Further, the results are consistent and do not depend on the choice of dependent variable. The estimates reveal that changes on

TABLE 4 THE DETERMINANTS OF HOUSING IMPROVEMENTS^a

Dependent Variables	CONSDIF	OWNDIF
CONSTANT	7886.430 (8891.795)	8823.580** (5015.789)
PERMINC	4.816 (5.737)	5.027* (3.027)
SEXH	11227.468*** (5287.450)	1658.137 (2991.847)
HHSIZE	-585.558 (825.693)	834.710** (482.219)
AGEH	-113.993 (158.811)	-45.054 (93.324)
MONTHS	-114.633 (265.848)	141.714 (151.311)
H	-.482*** (.232)	-.223*** (.070)
R ²	.19	.23
F	1.74	2.17
N	51	51

^aSee Table 3 for asterisk code.

SOURCE: Jimenez, *op. cit.* (1981).

housing are positively correlated with income. This result does not achieve a high degree of significance but the point estimate is stable across specifications. The demographic variables appear to behave consistently as well as across the dependent variables. A consistent result in the housing demand literature is that female-headed household heads consume more housing than their male counterparts (Mayo, 1981). This result is not found here at least partly because some of the effect of SEXH probably has a negative effect on μ , the efficiency parameter from converting stock into consumable flows. Age of head also seems to affect ΔH through μ . Older household heads definitely tend to end up with structures of lower quality. The effect of the initial value is what we would expect—negative and highly significant. MONTHS has an ambiguous but insignificant effect on differences in real value, which would tend to validate our earlier assumption that behaviour in anticipation of being reblocked does not affect the results.

LESSONS LEARNED

The success or failure of a squatter upgrading project is difficult to evaluate. To what extent has a particular project succeeded in inducing an improvement in the living conditions of the target population? Visual inspection, while useful, may be misleading and would not be able to tell

us whether the squatters in the community have, on average, significantly improved their dwelling. Policy makers need such a summary statistic to determine the success of a particular project.

This paper has proposed and implemented a methodology for measuring net changes in the stock of housing in self-help housing projects. Hedonic coefficients are first estimated from an equation relating house value to the characteristics of dwelling units before the implementation of a large self-help (slum upgrading) project in Manila. These coefficients are then used to predict housing value after project implementation, using the characteristics of dwelling units three months after that dwelling was 'reached' by the project. This methodology is more appropriate than simply attempting to calculate amounts spent on materials or labour because: (a) we do not know how those materials add to the quality of the house, and (b) most of the materials and labour used are not paid for. By applying this methodology, this paper has estimated that within 3 months, housing improved in the sample by 30 per cent to 44 per cent. It is concluded, at least for this sample, that the self-help housing project has been effective in raising average dwelling quality in the area by a substantial magnitude in a short space of time.

The paper also attempts to relate the changes in quality to certain socio-economic variables such as income and demographic characteristics. It is estimated that income has a positive impact on changes in quality, although not as large as one might suspect. For the sample in question, a household which is twice as rich as another is likely to undertake improvements which will lead to a change in dwelling unit quality that is 70 per cent greater. The extent of the improvement is also significantly affected by demographic characteristics. A male-headed household will experience a greater improvement in dwelling unit quality than a female-headed household. The older is the household head, the less is the amount of improvement that is to be expected. These findings are attributable to the greater costs females and older heads are likely to incur in attempting to improve their dwellings by self-help.

The estimates of the degree of improvement would be particularly useful in future project evaluation. One of the primary benefits of a squatter upgrading project is the amount of structural improvement it will generate. By knowing the socio-economic characteristics of the target population and by using the estimated behavioural relationships such as those described in the preceding paragraph, possible improvements in housing quality can be predicted.

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Non-Plan Settlements in a Planned City

MADHU SARIN

THE NEGATION of some of the basic objectives of Chandigarh's master plan began with the very start of construction. The majority of the people first to arrive at the site were construction workers. Within the first two years, the site was the scene of intense activity; with 30,000 workers—both men and women—working seven days a week.

In 1953, at a conference in Paris, Le Corbusier described the experience of Chandigarh under construction:

Things were done *à l'Indienne*, that is to say with an innumerable labour force and very few machines. . . . The picturesqueness of the Indian enterprise is extraordinary; women in *saris* carry bricks on their heads; the men lay the bricks; the children play in the heaps of sand. In India one does not 'Taylorise' the design to economise on labour since the population is innumerable. Everyone sleeps on the spot under a rush mat carried on four stakes. The gangs of workmen arrive from afar with their families.¹

THE GROWTH OF NON-PLAN SETTLEMENTS IN CHANDIGARH

The general poverty of the mass of the population and the under-development of the Indian economy made this cheap and abundant labour force available. Financial and technological constraints meant that most of the city had to be built manually, with machinery limited to a few bulldozers and concrete mixers. Thus, some of the earliest settlements to emerge on the site were large clusters of thatch huts adjoining major construction works, built by the labour to provide rudimentary shelter for themselves. One of the largest of such settlements grew up adjacent to Bajwada village to the south of sector 22. The shops and other services increasingly available there catered for its basic requirements.

¹Le Corbusier, *Conference d'Information au Palais de La Decouverte*, March 18, 1953, Paris, Archives, Fondation Le Corbusier, translated by the author.

In the early 1950s, daily wages for unskilled work were extremely low (as they continue to be today after accounting for inflation), between Rs. 1.50 to Rs. 2 per day, barely sufficient for subsistence. Reflecting on the cheapness of the smallest planned house, Fry later wrote:

The low cost of this, indeed of all housing, owes much to the cheapness of bricks at 30 shillings per thousand made without any machinery on the periphery of the site; *and to a labour force of men, women and children, underpaid, unhoused and uncared for*, turning the heart by their beauty and cheerfulness under conditions as bad as could be imagined.² (emphasis added)

That even the cheapest planned house for non-government employees was not going to be accessible to large numbers was also noted by Fry, for he wrote,

When we began to move about, we realised that there were vast masses of people who were not included in the project estimate, and we tried to make provision for them, but in a certain sense we failed. There was no economy on which we could do it, even with the smallest houses.³

Thus, the standards of development specified in the plan necessitated its violation from the start of construction; planned development required non plan settlements for its very implementation.

During the first 7 or 8 years, this pattern of planned and parallel non-plan settlement continued without causing much concern to the authorities. However, as construction stretched over larger areas, the labour settlements began to be seen as coming in the way of planned development and as an undesirable precedent for 'encroachments' on public land in the new city. Accordingly, in 1958, the Capital Project Organisation (CPO) decided to remove all non plan settlements. Notices were issued to their inhabitants to remove their huts from Chandigarh at their own cost.

The eviction notices manifested a fundamental contradiction typical of today's Third World urban context. Technically speaking, the residents were violating the property laws of the country by occupying land which they had neither purchased nor rented from its owner. The contradiction lay in the fact, that the majority of them *could not* do so because of their

²M. Fry, *Chandigarh—New Capital City*, The Architectural Record, 139-148, New York, June 1955.

³M. Fry, "Chandigarh: Capital of the Punjab", *Journal of the Royal Institute of British Architects*, Ser. 3, 62, January 1955, pp. 87-94.

economic circumstances. Their extremely low daily wages left no household savings available for the purpose. In addition, the development standards laid down by the master plan further increased the costs of acquiring legal rights to land use. Conceivably, in a situation of 'unplanned' urban growth through gradual addition to an existing settlement, at least some of the non plan residents could have acquired undeveloped agricultural land on the periphery at a low cost. Chandigarh's planning framework left on such option open. Effectively, the Estate Officer's eviction notices demanded that the construction labour either left the city, which was clearly not intended as without them construction could not proceed, or, *that they stop occupying space*, something humanly impossible.

Faced with the situation, the Capital Workers Union demanded alternative settlement sites or built up accommodation from the CPO on terms accessible to the labourers, but to no avail. The authorities ordered the forceful demolition of all huts in the city. Left with no other recourse, the settlement residents prevented this by lying in front of the bulldozers.

The First 'Temporary' Resettlement

It was decided to yield partially to the demands of the residents. Three peripheral sites, located in sector 26, the Industrial Area, and just beyond the university in sector 14, were demarcated as 'temporary' locations for what were called 'labour colonies'. In 1964, after the destruction of another settlement by fire, its inhabitants were moved to a fourth 'labour colony' in the totally undeveloped sector 25.

Relocation in the 'labour colonies' was fairly systematic. In each, a number of plots measuring 14' 7½" by 19' 6" were demarcated along parallel streets, some of these facing rectangular open spaces. Each household was allotted a plot at a rent of Rs. 1.50 per month. No agreements on terms of conditions of tenure were signed. However, a verbal assurance was given by the authorities that within a period of five years all the allottees would be permanently rehoused in the planned part of the city. In the meantime, each household was permitted to build any type of improvised structure it could afford. The creation of the labour colonies marked the first participation of the CPO itself in violating the plan, although it was explained as a 'temporary' measure.

The peripheral locations of the 'labour colonies', although justified on the grounds of their not interfering with planned development, had important implications for the future of their residents. First, it was a clear demonstration of the impact of urban planning on their situation. They were removed from areas planned to be developed in the near future, so that those who could pay for the costs of development could be given legal rights to ownership or use.

Secondly, as they were being removed far from areas scheduled for development in the near future, they would remain 'invisible' to other sections of the community for a long time to come.

Thirdly, because of lack of public transport and road facilities, particularly on the periphery, they would have to walk long distances every day to both seek and go to work.

Fourthly, as the colonies were supposedly 'temporary', not providing them even basic services could be justified. A major positive objective of the plan was its commitment to ensure access to publicly provided infrastructure and services to all sections of the population. By being granted only a 'temporary' status, the labour colonies were excluded from this commitment. The Administration provided only a few communal water taps in each labour Colony to start with.

The 1,445 plots carved out in the beginning exceeded the total number of households at that time. Any other building huts elsewhere in the city, when evicted, could apply of plots in one of the labour colonies. By 1965, the total number of authorised plots has reached 2,182. After this, no further plots were allocated.⁴

Around 1963, the settlement which had emerged adjoining Bajwada village was also removed. The residents were given verbal permission to move to one of the existing 'labour colonies'. As this group was not 'officially' authorised to settle in the labour colonies, even minimal facilities such as communal water taps were not provided for them.

Attempted Prevention of Growth by Force

The policy decision to stop further allotment of 'authorised' plots in the labour colonies was justified on the ground that having 'authorised' lessees imposed a certain responsibility on the administration to resettle them in regularly planned houses. Because of the commitment of all available financial resources to developing the city to high standards, it was argued that the colonies' continued growth would make it impossible for the Administration to rehouse the increasing numbers of people. Therefore, it was decided to try and stop the growth of the colonies altogether. To achieve this, in addition to stopping the allotment of new plots, the enforcement staff was instructed to demolish any new 'unauthorised' structures even in these settlements.

The implication of this was that the new city would legitimately admit only settlers above a certain economic level. The planned city was attempting to deal with the problems of poverty by keeping the poor out. It is important to note that this policy was adopted *after* the land sale policy had been changed to auctioning even residential plots to the highest bidders.

⁴Official Records, Chandigarh Administration.

In spite of fairly frequent demolition raids, it proved impossible to curb the growth of non plan settlements. On the contrary, in addition to the 'unauthorised' growth of existing labour colonies, a number of settlements emerged on totally unauthorised locations. As a result, an artificial division was created, by virtue of their respective 'authorised' and 'unauthorised' statuses, between people who were essentially in the same situation.

In the meantime, the continued lack of any action by the Administration either to provide alternative accommodation or improve the services in the original labour colonies, started leading to increased agitation by their residents. Slowly, through the years, and only after persistent demonstration and demands, marginal improvements were made. A few communal dry latrines, minimal street lighting, primary schools, etc., were provided in each.

Towards a Policy Change

Towards the end of the 1960s, the continued presence of the labour colonies, and their deteriorating environmental conditions due to the pressure of growing populations became a source of official embarrassment. Their initial 'invisibility' was becoming uncomfortably visible and a blotch on the 'City Beautiful'.

The 'problem' was discussed by the local advisory committee in May 1969. A sub-committee was appointed to screen their residents. It recommended that authorised lessees should be allowed to stay while all unauthorised occupants, except those engaged in 14 selected occupations, should be evicted.

Unconcerned about the arbitrary nature of this screening exercise the main pre-occupation of the administration was to move the 'labour colonies' as soon as possible. The Administration's right to continue labelling them as 'temporary' was increasingly under the threat of repudiation. Several years of urban experience had heightened the consciousness of the residents of their legitimate status as citizens equal to the others, and they were beginning to *demand* equal treatment rather than being *given* what the Administration deemed fit for them.

In September 1971, the estate office carried out a survey in accordance with the screening criteria proposed by the sub-committee. The findings of the survey are summarised in Table 1.

In addition to the total of 4,481 dwellings found in the original labour colonies, there were 1,586 dwellings in 6 totally unauthorised settlements located in different, as yet mainly undeveloped, sectors. Thus, despite the attempt to physically *stop* the growth of non plan settlements, they continued to grow. The only difference was that by 1971, out of the total of 6,067 structures, only 34 per cent were authorised, the remaining 66 per cent being 'unauthorised'. As a result of the screening process

TABLE 1 DISTRIBUTION OF 'AUTHORISED' AND 'UNAUTHORISED' STRUCTURES IN 'LABOUR COLONIES' IN 1971 AND UNAUTHORISED OCCUPANTS 'SCREENED' INTO 'APPROVED' AND 'OTHER THAN 'APPROVED' CATEGORIES BY THE ESTATE OFFICE

Name of colony	Auth. structures	Unauth. structures	3 as percentage of 2	Unauthorised occupants	
				Approved category	Other than approved cat.
1. Industrial Area	585	1277	218.3	234	1043
2. Sector-26	738	241	32.7	233	8
3. Sector-14	541	676	125.0	622	54
4. Sector-25	196	227	116.0	220	7
TOTAL	2060	2421	117.5	1309	1112

recommended by the special sub-committee, 32.6 per cent of the unauthorised dwellings were further classified into a new category of 'approved unauthorised'. The occupants of the remaining 2,698 dwellings were to be evicted.

Towards Resettlement of the 'Temporary' Resettlement

In 1972-73, the Administration decided to try and get rid of the problem quickly by building 6,000 pucca one room tenements and moving the labour colony residents into them on a monthly licence basis. A costing exercise revealed that Rs. 50 million would be required. It was proposed to let the tenements at a monthly fee of Rs. 30, although to recover the interest alone would have required a fee of between Rs. 60 and Rs. 70.

The Planning Commission, however, approved a sum of Rs. 15 million only. It recommended that while the 'domestic service class' among the labour colony residents could be housed in pucca tenements within the residential sectors, the construction labour class, which is 'essentially of a migratory nature' could be located on the periphery, and provided improvised hutments on developed plots.⁵

Accordingly the administration formulated a scheme under which all the residents of the existing non-plan settlements would be housed in either pucca 1½ room tenements built to master plan standards within residential sectors, or on 'transit' sites located on the periphery of the

⁵Government of India, Recommendations of the Adviser, Planning Commission, Programme Administration, on the 5th Five Year Plan, 1974-79 and Annual Plan 1974-75, Chandigarh Administration, (mimeo), 1973.

plan area where lessees would again be allowed to build their own 'temporary' structures to standards lower than the official ones. The scheme was notified in April 1975 under the title 'Licensing of Tenements and Transit Sites in Chandigarh Scheme', but will be referred to here as the resettlement scheme.

At the beginning of 1974, the estate office carried out another survey of non-plan settlements and found that the number of dwellings had increased by 25 per cent to about 8,000. Under the terms of the resettlement scheme, only those households listed in one or other of the surveys, or who could prove residence in one of the settlements since before 1971 or upto the beginning of 1974 were to be eligible for alternative accommodation. Thus, instead of dividing people on the basis of occupation, their length of residence in the city became the main criterion in determining eligibility. Older residents were to be eligible for pucca tenements, and more recent ones for transit sites only.

From the residents' point of view, in the case of those offered pucca tenements, the main advantage lies in their acquiring access to such accommodation at about a quarter of the market rent. In addition, the majority would be living in pucca, fully serviced dwellings for the first time in their lives. The main advantage for those allotted transit sites would be the acknowledgement of their existence by the authorities, through the acquisition of *de jure* status, again perhaps for the first time in their lives.

The coercive power of these advantages, given the state of insecurity in which the residents have been living, is phenomenal. However, it is not without heavy economic, legal and political costs for those involved.

The Terms of Resettlement

The terms of resettlement are entirely biased towards the administration's convenience, who neither made an assessment of the impact of resettlement on the families, incomes or employment of the residents, nor is prepared to accept settlement leaders putting forward residents' demands. The leaders are simply labelled exploitative elements 'misleading' the people and the only 'participation' acceptable to the authorities is total 'voluntary' compliance with official dictates. No physical force is used. The residents *have* to move 'voluntarily' and the administration is prepared to wait until they fall in line.

For those allotted pucca tenements there are substantial disadvantages. They receive no compensation for the dwellings they built in the labour colonies, which in some cases were good structures. They are allowed to dismantle the buildings and sell the materials, but the price of these is negligible compared with the market value the structures had obtained. Thus the residents lose the right to realise the exchange

value of their houses, a mechanism which serves to protect household savings against inflation.

In terms of space, all receive the same standard accommodation, comprising one room of about 100 square feet, a kitchen, bathroom, W.C., and an open terrace, whereas some of the larger households had between two to five rooms before. In addition, the monthly costs for each household increase from Rs. 1.50 to Rs. 30 (to Rs. 45 in more recent allotments) plus water and electricity charges. This licence fee can be revised by the Estate Office subsequently.

The terms on which the tenements are allotted represent a unilateral contract involving no long-term security of tenure, and the licence can be cancelled in the event of non-payment of (or an inability to pay) the monthly fee, if the household income exceeds Rs. 500, or if the licence or one of his dependents acquires land or building in the union territory.

The tenements are to be used exclusively for residence. Many households who were using their dwellings for working (as carpenters, cycle repairers and potters, etc.) will find their livelihood jeopardised, at least from the legal point of view. Further, households, who were keeping pigs, buffaloes, cows and chicken to supplement their incomes or diets, will lose this facility.

Every licensee has to maintain a passbook, with photographs of himself and all members of his household. He has to give details of the ages, occupations and relationship of each member and to notify any change in the household to the estate officer within 15 days.

The majority of the above disadvantages also apply to those allotted 'transit' sites, although in somewhat different forms. They are provided with sites of either 15 by 20 feet or 10 by 30 feet (recently increased to about 10 by 40 feet), on the 'site and services' principle. The services include minimal street lighting, communal water taps, latrines and baths, brick paved streets, open drains, and the option of electricity connections on payment of the normal charges. Provision is made for a school and a number of shop sites within the camps. In 1979, seeing that the new transit camps looked no different from the old labour colonies, the standards were raised to a plot size of 37.5 ft x 10.75 ft on which foundations upto plinth level of one room and individual water and sewerage connections for a bath and WC were provided. While the standards improved, the affordability of the units for many decreased with this change.

The licensees are required to demolish their structures in the old settlements and rebuild on the transit sites. Although they may re-use the materials, in many cases this is not possible as they are required to build to minimum standard, although much lower than those for the

rest of the city and materials, such as, mud and thatch are not permitted.

The monthly costs for each household are a licence fee of Rs. 15 and a loan repayment (in the case of those acquiring loans) of another Rs. 32 or more over a period of four years. Initially the period of the lease was only one year, renewable yearly at the discretion of the administration. In subsequent camps, this was increased to five years to enable allottees to obtain bank loans for house building. At the termination of lease, compensation for the dwellings will be payable as assessed by the estate office taking into account the cost of construction and allowing for 'depreciation on account of wear and tear'. Thus again, the residents will not have the right to realise the exchange value of their investments.

Finally, because of the 'temporary' nature of the transit camps, they are to be located outside the master plan boundaries, often far removed from existing development and sources of employment.

Resettlement—the Limits of Autonomy

The construction of tenements began in 1974 and the industrial area labour colony was the first selected for resettlement. Not only was it the largest non-plan settlement in the city, with a population of 6,446 in 1971 (Census of India, 1971), but it was the most organised and was generally better off than other settlements.

By the beginning of 1975, over 600 tenements were ready but no move was taking place. Enquiries revealed that the authorities had lost the nerve to enforce relocation. A visit by the Chief Commissioner along with some senior officers almost led to a riot. The residents protested against the resettlement scheme demanding a better alternative after having been forced to live in squalid conditions for so many years.

However, the start of the emergency in June 1975 changed the situation. By August, resettlement of the industrial area colony was under way. According to the estate officer, a lot of resistance was offered by the residents initially. But he felt it was a small proportion of the population, consisting of the local bosses, who were responsible for all the trouble, while the others were the genuine poor, amenable to any proposal. The authorities deal with this situation by isolating the leaders, suggesting to the rest that they were misleading them and that they collected donations for themselves. The administration refused to recognise any representatives of the residents, making it clear that it would negotiate only with individual households, and with them only in connection with their individual problems relating to the move.

Very soon, any organised resistance was totally destroyed, and collective efforts were fast converted into separate, individual demands. Once allotment had started, there was no possibility of collective

negotiation; individuals scrambled for the best deal they could obtain. The vast majority preferred pucca tenements. Those unable to provide proof of residence before 1971 pleaded to be considered on the basis of their personal testimonies that they had indeed been resident since then. Those not eligible for tenements tried to invent evidence to the contrary. Long absent landlords returned to throw out their tenants to obtain allotments in their names.

Democracy and the Freedom Expression

Following the announcement of general elections and a relaxation of the emergency in January 1977, the people felt free to express their demands again. One of the first demands of the transit camp residents was that they should be given permanent security of tenure there. The administration has given verbal assurances that the residents will not be forced to move 'at least for another 10 to 20 years'. At the same time, it is not prepared to legalise this assurance by changing the licensees' lease deeds accordingly. The only written concession to date has come in the form of the lease documents for the latest transit camp saying that the lease of five years is, 'extendable to 20 years'. In the words of the officer incharge of resettlement "99 year leases are only given to those who pay auction prices". The same officer, when asked why the short leases and licensing were being used, replied that this was to enable the administration to reacquire the land "should it need it for some other purpose in 10 to 15 years time". And asked about the likely costs and disturbance that this would mean for those being 'rehabilitated', he simply dismissed it as a consideration. Of course, it was not going to mean any problems for those made to move.

The operation of the resettlement scheme continues although at a much slower pace than that achieved during emergency days. Between 1961 and 1971, while the population of the whole city increased by 144.9 per cent, that of its non-plan settlements grew by 230 per cent.⁶ Between 1971 and 1974, the number of households living in them increased from 6000 to 8000. By June 1981, after the administration had 'resettled' 12,000 non-plan households, over 6,000 continued to reside in non-plan settlements.⁷

THE PEOPLE OF THE NON-PLAN SETTLEMENTS

The socio-economic circumstances of the people living in the non-plan settlements cannot be understood unless seen in relation to the dominant structure of the city's economy. The two are inextricably

⁶V.S. D'Souza, "People Prevail Over Plan", *Economic and Political Weekly*, No. 38, September 18, 1976, pp. 1526-28.

⁷*Sunday Tribune*, Chandigarh, June 28, 1981,

linked—one from a position of domination, and the other of subordination. In almost every sense, the residents of the non-plan settlements find themselves trapped in a position of unequal exchange. However, the city itself does not exist in isolation from the regional and national economies, and the circumstances of the non-plan settlements manifest the interaction between the city and the wider regional and national contexts in terms of the characteristics being produced locally by the national model of development.

The Fieldwork

The data presented here and in the following part are based on fieldwork carried out during 1973-75, whose objectives were to attempt to understand the role of the non-plan settlements in the urban structure of Chandigarh, and the process of their growth, by examining:

1. The socio-economic characteristics of their population compared to that in the planned part of the city.
2. The demographic characteristics of, and economic opportunities available to the households living in them.
3. The occupational, income and employment structure of the heads of households and the extent of occupational mobility among them.
4. Their spatial distribution in the city and the significance of location for households in individual settlements.
5. The characteristics of the process of migration to, and settlement within, the city.
6. The process of housing in terms of investment, production and use evident in them.
7. The effects of the Administration's policies aimed at curbing, controlling and regulating their growth and their potential for being incorporated within the plan.

The fieldwork was carried out in two stages. Following a study of the 1971 Census data, the first consisted of a field survey of eight selected settlements comprising all four 'authorised labour colonies' and four totally unauthorised ones. These represented almost all the non-plan settlements in the city, only three 'unauthorised' ones—located, respectively, in Bajwada, Sector 20 adjoining the wholesale market, and one near the entrance to the city along the Ambala-Delhi road, being excluded.

In order to obtain sufficiently diversified and representative data, it was decided to cover a 5 per cent sample of households, keeping the household as the unit of investigation. A household was defined as a group of people, whether related or not, living together under the same

roof. Selection was based on the location of individual dwellings, the head of the household of each 20th dwelling being interviewed. The sample consisted of 293 households of which 286 interview schedules were completed*. Of the seven schedules not completed, in two cases the residents were away on annual visits to their home communities, one dwelling had recently been vacated, and four respondents refused to answer after the initial questions, showing their feeling of insecurity which led to distrust of the interviewers.

The second stage of the investigation consisted of visiting a number of selected households with whom contact had been made during the main survey. These visits took place over a period of almost a year in order to obtain the kind of information and understanding which is not possible from interview schedules. During this period, the forms of collective organisation and leadership patterns existing in the settlements and their effective roles were studied.

Both here and later, the terms 'head of household' and 'respondent' are used interchangeably.

Population Characteristics from the 1971 Census

Details of the distribution of population between the 'planned' part of Chandigarh and its non-plan settlements as recorded during the 1971 Census are shown in Table 2, and, as is evident from this table, the population of the settlements had a number of outstanding differences from that of the planned part of the city.

1. The average household size was smaller than for the rest of the city.
2. The sex ratio showed a much lower proportion of females per 1,000 males compared to the whole city. Chandigarh, itself, had only 752 females per 1,000 males compared to 930 for the country as a whole, but this is attributed to the high proportion of students in the city's educational institutions, and its being still at the development stage. But with only 655 females per 1,000 males in the settlements, there is evidence of people being unable to afford to bring their dependents to the city.
3. Although their total population was only 10.9 per cent of the city's population, it represented as much as 43 per cent of those belonging to the 'scheduled' or backward castes in the city. Thus while 40 per cent of their population was scheduled caste, the proportion in the planned part of the city was only 6 per cent.

*This was later supplemented through further visits and active involvement with the problems of the settlement residents during April to November 1977, after an absence of two years from the city.

4. Only 27 per cent of their population was recorded as literate compared to 71 per cent for the planned part. (During the 1971 Census, the union territory was found to have the highest literacy rate in the country.)
5. As much as 42 per cent of their population was working compared to 32 per cent in the planned part, there also being a slightly higher incidence of female workers in the settlements. However, the occupations of their working population were disproportionately concentrated in the categories of 'construction', 'other than household industry', and 'transport, storage and communications' the first representing 71 per cent of the city's construction workers. In the case of female workers, the difference was still further accentuated with as much as 88 per cent of the city's female construction workers being in the settlements.

Characteristics of the Non-plan Settlement People

The households of the 286 respondents in the sample represented a total population of 1,341, of which 531 (40%) were working. Of these 424 were males, 94 females, and 12 children aged between 6 and 14. The proportion of female workers to the total was thus much higher than the 10 per cent recorded in the Census. 32.5 per cent were literate, a slightly higher proportion than indicated in the Census, while 57 per cent of the households belonged to 'scheduled' castes, a much higher proportion than the Census figure (Table 2, column 4).

Some 80 per cent of the heads of households had come from rural backgrounds, the largest proportion being from UP, followed by Punjab, Haryana and Rajasthan, these four states being in the region surrounding Chandigarh.

All heads of households were males and 89 per cent were married, 5 per cent single and 6 per cent widowers or separated. Almost 80 per cent were aged between 26 and 58, and only 15 per cent were between 15 and 25.

Household sizes varied from single person households to one case of a joint family of 15 members, the average being 4.7 which is larger than the 4.2 for the whole city and 3.9 for the non-plan settlements, as recorded in the Census. This difference was probably because of an under-representation of single person households in the sample, most of whom would have been living in the recent unauthorised settlements not covered by the survey.

Households predominantly consisted of nuclear or joint families or of close friends or relatives staying with another nuclear family. Nearly 20 per cent of the households had no female members, a typical characteristic of Indian male-dominated migration. More than half of

TABLE 2 POPULATION DISTRIBUTION IN CHANDIGARH IN 1971

	Chandigarh city (total)	'Planned' part of city	'Non-plan' settlements	3 as percen- tage of 2
	(1)	(2)	(3)	(4)
Number of households	51,554	45,510	6,044	11.72
Household size	4.24	4.28	3.94	
Total population	218,743	194,879	23,864	10.91
Sex ratio (females per 1000 males)	752	765	655	
Scheduled caste population	21,487	12,272	9,215	42.88
Literate population	145,048	138,594	6,454	4.44
Literacy ratio	66.30	71.12	27.04	
Workers as a percentage of total population	33.34	32.27	42.09	
Economic Distribution of workers into different economic activities				
	No. (per cent)	No. (per cent)	No. (per cent)	
Agriculture, livestock, mining and quarrying	707 (1.0)	660 (1.1)	47 (0.5)	6.64
Industry (household)	293 (0.4)	267 (0.4)	26 (0.3)	8.87
Industry (other than household)	9,028 (12.4)	6,799 (10.8)	2,229 (22.2)	25.69
Construction	3,795 (5.2)	1,112 (1.8)	2,683 (26.7)	70.69
Transport, storage and communication	3,095 (4.2)	2,564 (4.1)	531 (5.3)	12.15
Trade and commerce	10,755 (14.2)	9,674 (15.4)	1,081 (10.8)	10.05
Other services	45,268 (62.1)	41,819 (66.6)	3,449 (34.3)	7.61
TOTAL	72,941(100.0)	62,895(100.0)	10,046(100.0)	15.97

SOURCE: *Census of India 1971*, Series 25—Chandigarh, District Census Handbook, part X-B.

these were single person households, the rest consisting of male friends or relatives sharing accommodation. An interesting characteristic of one person households was that a majority of them did not consist of unmarried men. The fact that they had acquired or built separate dwellings was possibly because of future plans to bring their dependents to the city.

In the case of almost half the total households, the respondents were the only working members, the rest having from two to one case of nine workers. The last was exceptional and consisted of eight recent male migrants from the same village who were staying temporarily with another, earlier migrant from their community.

As many as 38 per cent of the workers in the sample, other than the heads of households, were women. These working women were confined to a third of the 82 per cent of, Households with female members. Their work was almost totally restricted to unskilled manual occupation, such as sweepers, casual domestic helpers and construction labourers, with the accompanying low incomes. 86 per cent of the households with women workers were those whose heads had incomes of Rs. 250 per month or less and all 13 working children in the sample belonged to similar households. Further, two-thirds of the heads of households with women workers were in unskilled occupations themselves. In many cases the households with two or more workers had a monthly household expenditure equal to or above their total incomes. Thus it is evident that the existence of more than one worker in a household, particularly where the additional workers were women, is more a product of economic necessity than an indication of well being or 'greed for higher incomes' as often assumed by some sections of the elite.

Households with their heads working on daily wages were the worst off. However, there were proportionately more workers, other than heads of households, in casual or daily wage employment, indicating the general low economic capacity of the work force (see Table 3).

TABLE 3 DISTRIBUTION OF FORMS OF EMPLOYMENT AMONGST WORKERS IN THE SAMPLE

	<i>Self-employed</i>	<i>Casual</i>	<i>Daily wages</i>	<i>Salaried</i>	<i>Not recorded</i>	<i>Total</i>
Heads of households	94 (32.9%)		66 (23.0%)	120 (41.9%)	6 (1.7%)	286 (100.0)
All workers including heads of households	145 (27.3%)	32 (0.0%)	133 (25.0%)	215 (40.5%)	6 (1.2%)	531 (100.0)

SOURCE: *Field Survey*, 1974.

The constraints of parents' economic circumstances were inevitably reflected in the poor care of, and educational opportunities available to, their children. Forty per cent of the households with women workers were unable to send their children to school, compared to 33 per cent of those whose female members were not working. In terms of the occupa-

tional group of the head of household, 58 per cent of those in unskilled occupations were not sending their children to school. This is often interpreted as the backward attitudes of illiterate parents who, it is believed, need to be 'persuaded' about the value of education. Evidence collected during fieldwork suggested a totally different picture. A majority of the parents wished to educate their children, but could not do so because of their economic circumstances. While the mother was away at work, an elder child stayed at home to mind the younger children. Those who had lived in Chandigarh longer appeared to have overcome this problem either because there were no young children or because they had consolidated their economic status. Seventy-one per cent of the households who had been in Chandigarh for 10 years or more were sending their children to school compared with 37 per cent of those who had come in the last five years.

Occupations, Incomes and Employment of Heads of Households

There was considerable diversity in the respondents' occupations, the range including those making a living by collecting scraps of paper and waste materials from rubbish heaps, to those in white collar employment such as bank clerks and class III government employees. For the sake of convenience all occupations have been classified into seven groups (see Table 4).

The relationship between the respondents' occupations and their incomes is shown in Table 5. Most occupation groups had incomes within ranges 3 and 4 in the table. Unskilled workers, the largest group, had the lowest incomes with a mean of only Rs. 146 per month, while that for semi-skilled workers was Rs. 208 per month. The widest income range was among those engaged in trade and commerce, indicating the importance of the scale of enterprise with the hawkers and *rehriwallas* at the bottom of the hierarchy and wholesale dealers in commodities such as fodder, waste materials (*kabadiwallas*) and timber at the top.

The general literacy level of the respondents was low, with almost 60 per cent totally illiterate. The distribution of illiteracy was further polarised among different occupational groups, 82 per cent of those in unskilled occupations being illiterate.

About 80 per cent of those in unskilled occupations belonged to scheduled and backward castes, while in the semi-skilled, skilled and general services groups there was a fairly even distribution between scheduled and non-scheduled castes. In the case of trade and commerce and livestock farming, the occupations in which incomes were among the highest, there was a much higher percentage of non-scheduled castes.

As already mentioned, 80 per cent of the respondents had migrated from rural areas. However, among those in unskilled occupations, the percentage was even higher, with 91 from rural backgrounds. Thus there

TABLE 4 DISTRIBUTION OF HEADS OF HOUSEHOLD BY OCCUPATION AND AUTHORISED AND UNAUTHORISED LOCATIONS

	<i>Authorised locations</i>	<i>Unauthorised locations</i>	<i>Total</i>	<i>Percentage of total</i>
1. <i>Unskilled manual</i>	56	57	113	39.0
construction labourer	28	14	42	
waste paper picker	1	1	2	
mall	3	6	9	
rickshaw puller	4	4	8	
sweeper	17	32	49	
boot polisher	3		3	
2. <i>Semi-skilled manual</i>	23	2	25	8.6
white washer	6		6	
lintol maker		1	1	
industrial worker	9	1	10	
cobbler	2		2	
cycle repairer	4		4	
clothes ironer	2		2	
3. <i>Skilled manual</i>	52	4	56	19.3
potter		1	1	
plumber	5		5	
welder	5	1	6	
mason	22		22	
carpenter	3		3	
tailor	10	1	11	
electrician	3		3	
painter/dyer	3	1	4	
concrete mixer operator	1		1	
4. <i>General services</i>	31	19	50	17.2
social worker/teacher	2		2	
government class IV employee	8	13	21	
government class III employee	12	3	15	
salesman/bank or poultry farm worker	4		4	
contractor	1		1	
scooter/taxi driver	4	2	6	
horse cart driver		1	1	
5. <i>Trade and Commerce</i>	25	8	38	11.4
wholesale dealer	4	2	6	
small shopkeeper	5	3	8	
tea shop	2	1	3	
rehriwalla	12	1	13	
repairing and selling sacks		1	1	
mobile hawker	2		2	
6. <i>Livestock</i>	5	3	8	2.7
pig farming		1	1	
dairy	5	2	7	
7. <i>Unemployed/retired/no response</i>	3	2	5	1.7
TOTAL	195	95	290	

SOURCE: *Field Survey*, 1974,

TABLE 5 MONTHLY INCOMES OF HEADS OF HOUSEHOLDS BY OCCUPATION GROUPS 1 TO 7 OF TABLE 4

Rupees	1	2	3	4	5	6	7	Total	Percentage
Nil							3	3	1.0
150 & below	51	3	2	9	4		2	71	24.8
151-250	57	16	28	23	7			131	45.8
251-350	2	5	20	14	11	1		53	18.5
351-500	1		4	4	5	2		16	5.6
501-1000				1	2	4		7	2.4
Above 1000					3			3	1.0
No response/ don't know					1	1		2	0.7
TOTAL	111	24	54	51	33	8	5	286	100
Mean income in rupees	146.4	208.4	249.1	233.8	363.3	607.1	75.0		

SOURCE: *Field Survey*, 1974.

was a distinct relation between unskilled occupations, low incomes, almost total illiteracy, scheduled castes and rural backgrounds.

The main forms of employment among the respondents were self-employment, work on daily wages, and salaried employment. Incomes from the last two are limited, being totally fixed for salaried workers. In the case of those working on daily wages, the maximum monthly income can only be 30 times the daily wage, that also being dependent on work being available on all days of the month. Further, the manual nature of the work and the length of the working day do not leave time or energy for supplementing income from other sources. Thus the combination of daily wage employment and unskilled occupation with its low income produce the most insecure and undesirable situation. Government salaried employment for unskilled occupations offers the comparative advantage of a regular income, security of employment and a number of other benefits. The respondents preference for this was evident as a high proportion (45 per cent) were government employees.

All those engaged in trade and commerce, and livestock farming were self-employed. A considerable variation of income is possible in self-employment, depending not only on the nature of the occupation but also the scale of the enterprise. Starting work as self-employed normally also requires a certain amount of capital investment. The economic status of the self-employed respondents was evident from the fact that almost half of them had invested less than Rs. 100. At the same time, 6 per cent had invested more than Rs. 2,000.

More than 50 per cent of those working on daily wages had monthly incomes of Rs. 150 and below. Salaried employees were comparatively better off, most being in the Rs. 151-250 bracket, while the self-employed had a much wider range of incomes. In addition to their main work 10 per cent of the households, other than the livestock farmers, were keeping one or two animals for milk or meat, either for themselves or to sell to supplement their incomes. The largest number of these were households whose heads were employed in general services or unskilled manual occupations.

The relationship between the respondents' employment and other variables such as caste, income, rural or urban background and state of origin displayed similar polarisation to that between their occupational groups and these variables. Thus, there were proportionally more respondents belonging to scheduled castes or coming from rural backgrounds working on daily wages and in government salaried employment.

Occupational Mobility of the Heads of Households

Before migrating to Chandigarh nearly 60 per cent of the heads of households had unskilled manual occupations, but by the time of the survey this had dropped to less than 40 per cent. For the many rural migrants, occupational mobility was a necessity. Of the 165 respondents in unskilled occupations before migrating, 153 were either agricultural labourers or small cultivators with uneconomic holdings. Since coming to Chandigarh, they had become construction labourers, sweepers, obtained work in general services and factories, and so on. Some, such as, cobblers and tailors, had reverted to their traditional caste occupations. Those who had been able to move into the semi-skilled, general services and trading occupations had generally been able to improve their economic and social circumstances.

Another significant aspect of the post-migration change was the considerable decrease in the number who were unemployed; from 7.3 per cent before migration it had dropped to 1 per cent indicating the relatively greater employment opportunities in the city. Much lower rates of unemployment among recent migrants have also been noted in other cities. This could be a result of those not finding employment, returning to their places of origin or going somewhere else. It was not possible to discover the proportion of migrants who had done so, but clearly, few could afford to remain unemployed in urban areas.

Occupational mobility was not evenly distributed among the respondents. While 36 per cent of the non-scheduled caste respondents had changed from unskilled occupations to more skilled or better income ones, only 7 per cent of the scheduled caste ones had been able to do so. Similarly, the number of those with urban backgrounds working in trade

and commerce had increased, while those with rural origins had, for the most part, only succeeded in improving their form of employment, and had not been able to change to more skilled occupations. Those from the more distant states, such as, Rajasthan and Tamil Nadu, had little or no occupational mobility. In particular, those from Tamil Nadu had all started with unskilled occupations on daily wages and had not changed from this situation despite 20 years' sojourn in Chandigarh. Punjabis had improved the most, moving from unskilled to skilled occupations, trade, and commerce or livestock farming.

There was slightly greater occupational mobility among older heads of households than the younger ones. Among the 15 to 25 age group, the change was mainly from student or unemployed or from unskilled to semi-skilled or general service occupations, but the change in the 26 to 58 age group was more even. Those older than this had mainly changed from unskilled manual occupations to petty trading or livestock farming, neither of which require much physical exertion. The relatively lesser mobility and general unskilled or semi-skilled occupations of the youngest age group is indicative of the slow process of acquisition of capital for trading, or skills for improving the exchange value of labour.

The respondents' occupations at the time of the survey were not necessarily their first in Chandigarh, 27 per cent had changed their occupation at least once, the maximum change being among those who had started as unskilled construction labourers. The largest proportion who had not been able to change their occupations since coming to Chandigarh were those working on daily wages. However, of those who had changed, the majority had started as daily wage labourers, but had now become self-employed or salaried employees. This was not only as a result of search for better employment, but as a response to the changed demand for unskilled labour in the city.

With the city's development, the demand for unskilled construction labourers has diminished. On the other hand, the growth of the higher income population has generated its own demand for domestic workers and other services. Many of the original construction workers who decided to settle in the city changed their occupations to meet this demand. This change is also evident in the changed pattern of employment among the respondents who had migrated to the city in recent years. While 40 per cent of those who migrated 15 or more years ago were still working on daily wages (almost exclusively as construction workers), only 10 per cent of those who had come in the last 5 years were doing so. At the same time, the proportion of salaried employees has been showing a constant rise, most being employed in unskilled or service government occupation.

Location and Characteristics of the Non-Plan Settlements

The major characteristic common to both the labour colonies and

unauthorised settlements was that both were confined to peripheral locations of the first phase of the master plan area. This pattern is untypical of most older Indian cities where such settlements tend to have a strong relationship with high density work areas and are often found in central locations. However, as described in the last part, this pattern in Chandigarh was enforced by the administration on the grounds that non-plan settlements represented a violation of the master plan.

Labour colonies on Authorised Sites

With the passage of time each of the four 'authorised' labour colonies developed its own character, largely determined by the extent and nature of the planned development in the vicinity. Socio-economic hierarchies developed between and within them. For example, the labour colony just behind the university in sector 14 has benefited considerably from the emergence of a whole range of employment opportunities as a result of the growth of the university with its resident population and the largest Post Graduate Medical Research Institute in India in an adjoining sector. These advantages were reflected in the occupations of the heads of households, 20 per cent of whom were government employees and working not as sweepers, but as postmen, clerks and peons. Women were able to supplement household incomes from casual work in the neighbouring sectors. Evidently, even at the time of its creation, a high proportion of the settlers in the colony were Punjabis engaged in relatively better occupations.⁸ Time had further reinforced these characteristics. However, such relative prosperity had totally bypassed the south Indian community living in a part of the colony. Almost all its workers had remained in unskilled work on daily wages, despite being resident in the city from 5 to 20 years. The Industrial Area labour colony displayed similar characteristics. With the growth of industry in the area, there were increased opportunities for both skilled and unskilled workers in the area. At the time of the survey 40 per cent of the respondents were in skilled occupations and factory labour represented another 14 per cent of the sample. In 1965, Punjabis represented 60 per cent of the residents⁹ and by 1974 they had increased to over 75 per cent. Further, while 57 per cent of the total survey sample were from scheduled castes, the proportion here was only 33 per cent.

The changes in the population of the sector 14 and industrial area labour colonies were partly due to the integration of their better housing stock into the city's housing market. Many original allottees had either sold or sublet their dwellings to realise their increased values. In

⁸V.S. D'Souza, *Social Structure of a Planned City: Chandigarh*, Orient Longman's, Delhi, 1968.

⁹*Ibid.*

addition, the locational advantages had led to the highest rates of unauthorised growth in them.

The sector 25 and 26 labour colonies had not benefited to the same extent from the city's development. Their immediate surroundings were either low density or totally undeveloped. Consequently, local opportunities for casual and unskilled work had remained limited. These disadvantages are clearly reflected in the occupations of the heads of households. For example, in the sector 26 labour colony in 1965 more than half the heads of households were construction workers, and in 1974 almost half the sample still had unskilled manual occupations. In the case of the sector 25 colony, all the respondents belonged to scheduled castes and 60 per cent were in unskilled manual occupations.

Settlements on Totally 'Unauthorised' Sites

These settlements, while also mainly on the periphery of the master plan area, owed their locations to a process of 'natural evolution' in which their relationships with neighbouring areas had played a significant role. Because of the absence of official control or the demarcation of plots, their layouts did not have any formal pattern of streets and plots were undefined, varying considerably in size. Total uncertainty about the future and experiences of frequent demolition by the enforcement staff had restricted dwellings to cheap structures with mud walls and thatch roofs.

The locations of the unauthorised settlements had been influenced by two different factors. Two of the largest, the Kumhar colony in sector 25 and the one spread over sectors 32 and 33, started in locations not demarcated for planned development in the near future, and where, consequently, preventive action was limited. The occupations of the heads of household were not necessarily dependent on being near other sources of activity.

The respondents' occupations in these two settlements were much less diverse than those in the labour colonies, with 66 per cent of those in sectors 32 and 33 and 60 per cent of those in Kumhar colony being in unskilled manual occupations, well over half in both cases working as government salaried employees and therefore not dependent on being immediately adjacent to major centres for work.

The second factor, which had had a determining influence on the locations of the other two unauthorised settlements surveyed was their close proximity to centres with a high demand for cheap unskilled labour. The growth of both settlements had been totally dependent on the availability of these employment opportunities in their immediate vicinity. For newly arrived rural migrants such settlements play an important role in enabling them to advertise their availability to those needing casual labour.

The striking feature of the four unauthorised settlements was that 93 per cent of their heads of households had rural backgrounds, 82 per cent of them belonged to scheduled castes and 83 per cent were from the two states of UP and Haryana.

Characteristics of Migration

The migration of new comers to the city represents the process of interaction between the local, regional and national contexts. By examining the process we can analyse not only the validity of the official assumptions regarding the motives for rural-urban migration, but also the viability of anticipating the nature and scale of such migration to the city, even if the apparently crude assumptions underlying Chandigarh's plan were replaced by more sophisticated ones. Only through such an examination can we estimate the actual possibility of total planning for any urban centre within the existing structure of the country's economy.

Here, it is useful to note that, as mentioned earlier, the majority of residents in a new town such as Chandigarh are migrants. Within the existing parameters of the national society, no one is worried by over-migration of the wealthy, even if they are unemployed. The 'problem' arises only when sections of the impoverished majority attempt to do the same thing. That there might be a direct relationship between the city's well off minority and the increased demand for services which they generate, and the proportion of its poorer residents dependent on fulfilling such demand, seldom crosses the minds of the authorities.

In the early years there was a much higher proportion of migrants from urban backgrounds than more recently. A substantial number of people displaced from urban areas during partition decided to settle in Chandigarh. Also the potential economic prospects in a new city attracted considerable numbers from smaller urban centres. With the growth of the city this attraction has declined. However, continuing social and economic pressures in the rural areas surrounding Chandigarh have produced an increase in rural migrants.

The earliest migration was predominantly from Punjab and Rajasthan. The Punjabis included displaced persons, while the Rajasthanis were mainly rural migrants who came as construction labour. During the next five years, the influx was mostly from Haryana and UP, changing to almost 60 per cent from UP alone in the five years from 1970-75.

This fluctuation in the number of migrants from different states during different periods, and also the proportions of their rural and urban backgrounds, is indicative of the different regional pressures triggering migration. Among Punjabis, the flow of largely urban migrants was a product of a search for better economic prospects. Their

success in having achieved that objective is evident from their relative prosperity compared with other respondents.

In the case of rural migrants, however, the factors influencing migration were and are quite different. Within the national context of increasing unemployment, a high rate of population growth, and the destruction of several traditional modes of production in rural areas, there are considerable regional disparities. Following the 'Green Revolution' of the mid-1960s, Punjab and Haryana, already predominantly agricultural states, underwent considerable improvement in rural conditions. Punjab, particularly, had the lowest rate of urban population growth in India between 1961 and 1971, 5.3 per cent against an average of 37.8 per cent for all states. However, certain districts of these states, particularly of Haryana, remained outside the orbit of improvement. Conditions in other states are much worse. Some backward districts of UP and Rajasthan remain very vulnerable to natural disasters such as drought which can render large numbers of people incapable of finding work or food. As a consequence, there are periodic streams of temporary or seasonal migration into more developed regions of the country and their metropolitan urban areas, and many of the migrants never return.

In Chandigarh's non-plan settlements, the earlier movement of migrants from Rajasthan was caused by a drought in some districts. The respondents in the survey who had migrated at that time decided to settle in the city as there was little to return to. Similarly, the increasing numbers of rural migrants from UP (almost 80 per cent of the respondents from UP had rural backgrounds) came for reasons of poverty or un(der)-employment. UP, besides being one of the most highly populated and backward states, is one of the most oppressive for those belonging to the lower castes. Thus, not surprisingly, a higher proportion of UP respondents (80 per cent) were from backward castes compared to respondents from other states. Although, even in cities like Chandigarh, those from scheduled or backward castes are only able to get the lowest paid, unskilled occupations, it is a considerable improvement on their conditions in rural areas. Urban conditions and forms of employment lessen traditional caste distinctions and enable them to escape feudal relationships, such as bonded labour, and become a part of the country's wage economy.

In the context of a predominantly rural country, where the vast majority of the population has no urban experience, for a rural migrant the decision to leave the traditional place of residence must be a momentous one. Almost 80 per cent of the respondents had decided to migrate for economic reasons. They were almost equally divided between those who had been forced to consider migration because of poverty or unemployment and those who were dissatisfied with local economic prospects and had decided to move in search of better ones.

Of the remaining 20 per cent, 6 per cent had been displaced by partition, 6 per cent had been transferred, and the rest had moved for various reasons such as family quarrels or simply a spirit of adventure and a desire to see life in a modern city.

The chief reason for choosing Chandigarh was a perception of better income or employment opportunities in a new capital city, and this factor alone accounted for more than half the respondents. Other major considerations were associated with family, relatives, or friends in the city who could be relied upon for assistance in finding work and a place to live. In fact, some 25 per cent had decided to come to the city because a friend or relative had invited them. The vast majority had made the move with considerable caution on the basis of information received from friends, relatives or neighbours. This caution was further evident from the fact that two-thirds of the respondents, again predominantly from rural backgrounds, had come first alone to Chandigarh. Only after finding work and some kind of shelter had they brought their dependents along. More than half those who had come in the previous five years still had dependents in their places of origin, and even a small proportion of those who had come 15 or more years ago still did so.

Further, the mere act of migration did not necessarily indicate a commitment to permanent residence in the city. Although two-thirds of the heads of households had decided to settle in Chandigarh, the rest were almost equally divided between those who were undecided and those who did not intend to stay permanently. The higher rate of uncertainty among those who had migrated in the last five years was again indicative of the slow and cautious process by which important decisions such as a permanent change to urban living are made.

It is significant that the Administration's policy to discourage further migration by demolishing new structures in the settlements had not affected the residents' decisions about staying in the city. There was no correlation between the number of times residents had been forced to move and the decision to stay or not. This indicates the relatively low priority housing or housing conditions have compared to other factors such as income and employment, from the point of view of influencing the decision to make a permanent move from place of origin.

People of the Non-plan Settlements and the National Context

For 60 per cent of the workers in unskilled occupations and working on daily wages or as self-employed (see Table 3) there could be little benefit from any statutory protection against fluctuations in the labour market. In comparison more than 60 per cent of the city's total work force is in government salaried employment, and although the majority have low, fixed salaries, they are protected against such fluctuations by security of employment and additional benefits such as health care, rent

allowances and revisions in pay scales.

The high proportion of non-salaried workers in the settlements implies a concentration of unorganised labourers who have to tend for themselves and are in a weak position to negotiate for better returns for their labour. Self-employment, romanticised and over-rated by many for the benefits it has to offer, means different things to different people as is evident from the sample. Those possessing some capital or skills change to self-employment as a means of bettering their economic status. However, for many it has few such benefits to offer. In the competitive environment for unskilled labour, at least 50 per cent of the self-employed found themselves condemned to self-employment. For a semi-skilled cobbler, self-employment does not necessarily mean an exercise of individual freedom, but merely a means of eking out a living by sitting and working on the pavement somewhere, unprotected from the elements or even by the law.

The migration of predominantly unskilled and impoverished rural migrants to the city is the clearest illustration of the way in which Chandigarh's structure is inextricably linked with the national context. The circumstances of the migrants, themselves a product of the processes in operation in the wider society, are reproduced in urban areas as a results of population mobility. Clearly, this mobility is not a blind one. The careful and cautious decision-making processes of the migrants, which underly this population movement, did not include direct consideration of the city's high environmental and design standards. Indirectly, however, these standards have been an attraction for them because of the demand for labour both their implementation and maintenance suggest. The growth of non-plan settlements in the city has thus been dependent on the capital investment in the city, whether controlled by the public or private sector. The workers in the settlements are, however, by no means confined to the unorganised tertiary sectors of the economy. They include organised industrial workers, government employees and construction workers employed by both public and private agencies.

From the point of view of the residents already in the non-plan settlements, the continuing migration of unskilled labour lowers their ability to improve their bargaining power through organised collective action. From the point of view of the newcomers, even the low and uncertain standards of living in the city are *an improvement* on their circumstances in their places of origin, and it is this which determines their decision to move.

The setting of the migrants has been a positive act, underterred by the prolonged hostility they encounter in the city. They have been expressing a determination to better their circumstances. Building their own shelter in the absence of any alternative also represents their will to transform their circumstances. Clearly it is the laws which have to be

challenged, rather than their determination to climb out of the vicious circles of deprivation and poverty. It would indeed be tragic if millions of impoverished people stopped attempting to find means for survival simply because existing laws do not permit them to take the necessary action. In this respect, what is a 'problem' for the authorities is clearly a 'solution' for the migrants.

However, there are very severe limitations to the improvement which a majority of predominantly unskilled labourers can achieve. The constraints are defined by the existing social and economic relationships which produce an ever increasing concentration of power in the hands of a minority at the cost of decreasing opportunities for the majority. In this respect, what is a short-term solution today is almost certain to become a worse long-term problem within the existing framework of development.

HOUSING AND INVESTMENT IN NON-PLAN SETTLEMENTS

'Self-help', 'self-build', 'dweller control'; these are some of the expressions which have become prominent in discussions about the building process in third world squatter or semi-legal settlements. A propagation of the advantages of self-help housing has accompanied the changing perceptions about such settlements in recent years. However, there is nothing new either in the concept of self-help or in the content of the discussions about it. Self-help as a solution to the deteriorating living conditions of the working classes was not only discussed but extensively practised in 19th century Europe, just as the assumptions on which it was justified were attacked by some contemporary writers.

History has testified to the fact that even in industrialised countries, access to better housing for large sections of the working class was ensured not through self-help but major state intervention in terms of subsidised housing. Even then, their housing problem remains far from solved, with a continuation of slums, inner city decay and homelessness.

Policies based on self-help or self-build, by attempting to tackle the low income housing problem in isolation from the dominant mechanisms prevailing in the rest of society, evade the relationship between the severe scarcity of resources at the household level and the structure of the total economy. The effects of this evasion and some of the myths surrounding the benefits of self-help housing to low-income households are highlighted by the history of the housing process in Chandigarh's non-plan settlements over a period of 15 years or so.

The Settlement Process and Residential Mobility

The major characteristic differentiating the residents of Chandigarh's non-plan settlements from those living in regular housing was that none

owned the land on which his dwelling was built. Those allotted authorised plots in the labour colonies had the status of temporary lessees of the government, the rest were illegal squatters on public land although the majority owned the structures built on it. Land tenure status has a major effect on the residents' attitudes towards their housing situations. For this reason the terms 'authorised' and 'unauthorised' have been used here to denote tenure status of individual dwellings and not of whole settlements. In fact, in the survey nearly two-thirds of the households were living in unauthorised dwellings.

For more than 40 per cent of the respondents, the settlements represented their first and only places of residence in the city. For a considerable number of the rest who had moved, some several times, the moves had been within non-plan settlements, either accompanied by a change of tenure status, or simply from one 'unauthorised' dwelling to another. However, during the last ten years a growing proportion (20% or more) had moved into the settlements from regular housing (see Fig. 1)

Among the respondents who had managed to obtain immediate access to authorised plots in the labour colonies, a considerable number had migrated to the city during the period when plots were relatively easily available. The rest had either managed to buy tenure rights from original allottees or were tenants of authorised lessees. Some had managed to get tenure status of their plots changed by persuasion or bribery of the staff collecting rents.

Most of those who had settled directly on unauthorised plots were living in unauthorised settlements and had come to the city during the last ten years. A small proportion of them had first lived in nearby villages or the neighbouring small town of Manimajra where the cost of living was much lower than in Chandigarh.

Of those whose moves had been from one unauthorised tenure status to another, the majority had done so because of estate office requirements. Most had had their dwellings demolished in one place and with no feasible alternative had simply built new unauthorised structures elsewhere.

Most respondents who had moved from planned residential areas into the settlements had done so because they could no longer afford the rising market rents for regular housing. Others had moved because they had been living with relatives or friends in subsidised government housing, but after bringing their families to the city there was no longer room for them. Long waiting lists for government housing, high rents in the private sector, or the inability to pay rent at all had forced them into the settlements.

Tenants and the Incidence of Subletting

Those allotted authorised plots are not allowed to sell or sublet

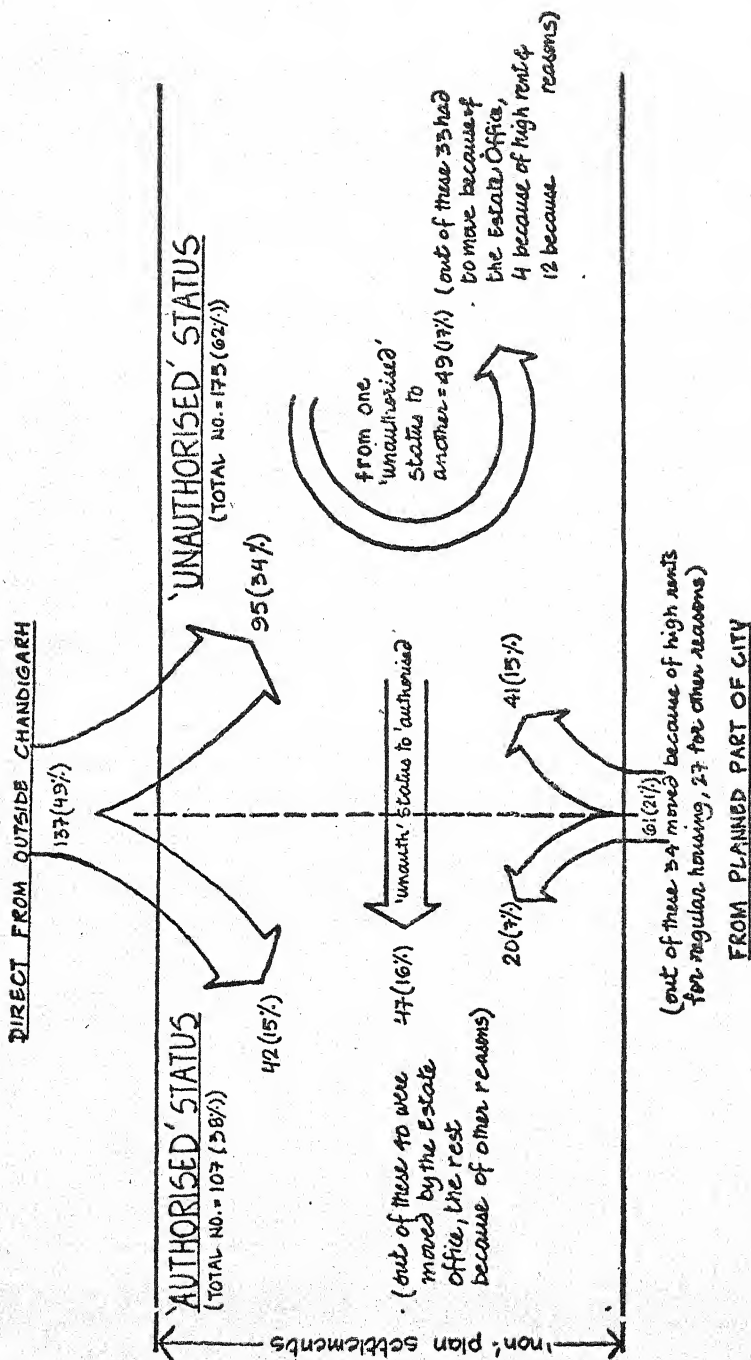


FIG. 1 DISTRIBUTION OF RESPONDENTS BY 'AUTHORISED'/'UNAUTHORISED' STATUS OF DWELLING, PREVIOUS PLACES OF RESIDENCE AND REASONS FOR MOVING INTO OR WITHIN THE SETTLEMENTS

either the land of their dwellings. The official arguments against selling or subletting are that authorised lessees were given the right to occupy government land for personal use only, and that its use for financial gain is an 'exploitation' of the privilege granted to them. The resulting restriction on the rights of the lessees to realise the exchange values of their investment has already been discussed.

The implication of the official rules for those leaving the city for good or going on extended visits to their places of origin is that the authorised lessees should simply abandon their dwellings to the authorities. None of the original lessees was foolish enough to do this even when moving elsewhere within the city.

Thus both subletting and outright sales had been taking place more or less from the inception of the labour colonies. At the time of the survey, subletting, in particular, appeared to be on the increase owing to the colonies' increased integration in the city's housing market. However, only 13 per cent of the respondents were tenants compared with 80 per cent in the city as a whole, indicating that few were using their housing as a commodity.

This is not necessarily typical of non-plan settlements elsewhere. In a study of a hutment settlement in Bombay¹⁰, it was found that 70 per cent of the households were tenants. A high degree of tenancy has been found in the squatter settlements of Dar-es-Salaam and Nairobi also. In Chandigarh, the comparatively low degree of tenancy was partly a result of the recency of the settlements, the ready availability of new land on which to build, and the minimal or nil rent paying ability of the lowest income households.

All except one of the tenants in the sample were living in the authorised labour colonies, and most of these were in authorised dwellings. Monthly rents varied from nothing to Rs. 40, the mean being Rs. 17 compared to about Rs. 65 for a single room in regular private housing. More than two-thirds of the tenants had only one room per household and were living in conditions of greater overcrowding than the owners.

Compared with owners, there was a higher proportion of tenant households with only one or two members and no women, indicating that they were migrants in the initial exploratory stage. Further, a higher proportion either did not intend to stay in the city or had not made up their minds. That as a group tenants did not include the lowest income households, indicated the necessity of some rent paying ability among them. The very low income levels of some households and the low cost of putting up minimal shelter were largely responsible for their resorting to self-building.

¹⁰A.R. Desai, and S.D. Pillai, *A Profile of an Indian Slum*, University of Bombay, Bombay, 1972.

The Housing Process Among the Owners

Eighty-six per cent of the owners in the sample had built their own dwellings. Most of the rest had bought them semi-built and completed construction and only 3 per cent had bought completed structures. Of the dwellings which had been bought, three-quarters were unauthorised which is significant in view of the authorities' allegation that 'unscrupulous' people exploit the labour colonies by making large profits by subletting or selling the rights to authorised plots.

The sums paid for complete or semi-built structures were generally in line with their market values at that time. These values were inevitably higher on authorised plots because of the greater security of tenure, and for some structures on unauthorised land the sale was only a token deal—one respondent having paid only Rs. 10 for his hut. The majority of sales seemed to have been the result of natural mobility among the households, rather than attempts to realise increased exchange values for the structures. What integration there was into the main housing market of the city had remained minimal.

More than half those who had been wholly or partially responsible for building their dwellings had done so in stages, marking additions or improvements over the years. Those who had built in one operation were primarily the owners of one-roomed thatched huts, which more or less have to be completed in one stage and require comparatively smaller investment.

The slow and gradual process of improvement and additional investment in housing was clearly evident from the length of residence of different respondents (see Fig. 2). More than two-thirds of those who had invested only up to Rs. 500 had been in Chandigarh for less than five years. However, even after 16 to 23 years in the city, 25 per cent of the households in this group had not invested more than this, the poor quality of their dwellings reflecting the negligible amount of 'improvement' within their reach.

Monetary Investment in Housing

The range of monetary investment in dwellings varied from as little as the Rs. 10 one man had paid for his hut to as much as Rs. 20,000 by one buffalo owner in the sector 14 labour colony. Three-quarters, however had invested Rs. 1,000 or less.

One of the major factors affecting investment was the tenure status of the land. Because of the greater security of tenure of authorised plots and the longer time that these had existed, investment in dwellings on them was considerably higher than in those built on unauthorised land. This was apparent from their higher standards of building, a majority of the houses having at least 4½ in burnt brick walls and flat roofs consisting of a thin layer of mud laid on cheap timber boarding. Most also had

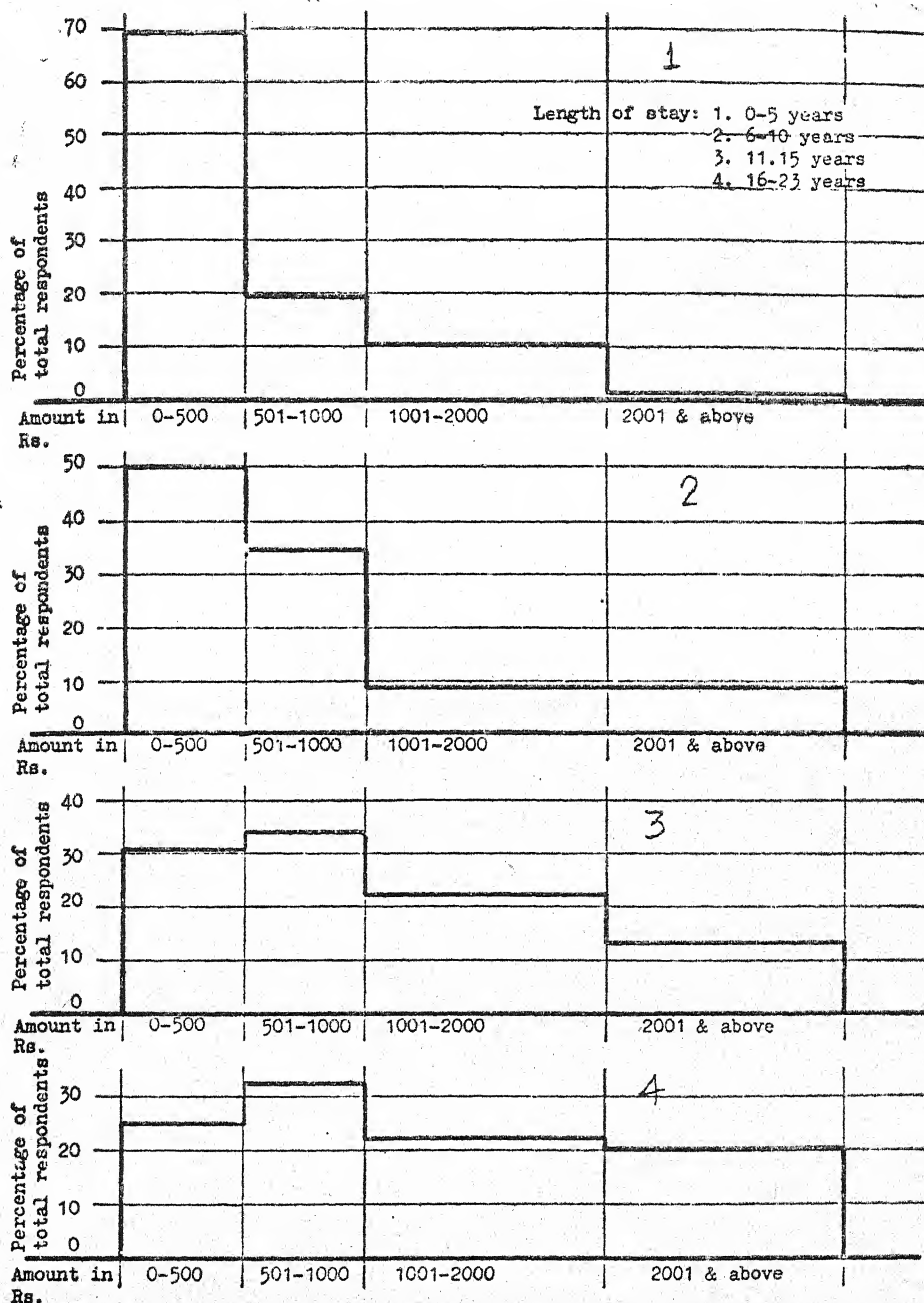


FIG. 2 DISTRIBUTION OF RESPONDENTS OWNING THEIR DWELLINGS BY LENGTH OF STAY IN CHANDIGARH AND TOTAL AMOUNT SPENT ON BUILDING OR BUYING HOUSE

doors for safety and windows for lighting and ventilation, while a few even had cement floors, reinforced concrete roofs and private electricity connections. However, some of the older houses already had badly cracked walls and unstable roofs, showing a very real danger of collapse during a summer wind storm or monsoon downpour.

The typical dwelling built on unauthorised land consisted of a mud-walled hut with a thatch roof and mud floors. Few had doors or windows and often there were only pieces of cloth hung across openings or second-hand timber boards put across them at night. Small holes in the walls stuffed with rags were used for ventilation. Many of the structures had no natural lighting or ventilation and the atmosphere was made worse by the smoky fuels used for cooking. Not surprisingly, the health of the occupants suffers, particularly as these conditions are accompanied by poor diet and malnutrition. Inevitably out-breaks of malaria in the city are most severe in the non-plan settlements.

However, even in the case of unauthorised dwellings there was some evidence of gradual improvement. Those who had the ability to do so, were attempting to improve their dwellings, and to minimise the risks of fire and collapse. But, the generally low quality of the construction was an obvious reflection of the technical and financial limitations of the owners. No matter how much they are exhorted to make improvements through self-help, for the most deprived among them, their is little possibility of betterment through their own resources.

As would have been expected, heads of households who still had dependents in their places of origin, or who either did not intend to stay permanently or were undecided about staying had invested much less than those whose dependents were with them and had decided to settle in the city. Because of the high rate of 'turnover' migration¹¹ in the country as a whole, the number of migrant households in such circumstances of uncertainty must be considerable. The rigid and stringent rules of the present resettlement scheme excludes it from being a viable alternative for such households and therefore the building of minimal unauthorised huts by such people, despite the heavy social and health costs are going to remain an integral part of the urban landscape, irrespective of any amended 'planning' framework which might be introduced.

Solutions worked out simply on the basis of the computed incomes of households, and the assumption that a standard proportion of these is available for housing do not take into account the diversity of other commitments of those in the initial stages of migration, for example the additional travelling costs to and from places of origin, running houses in two places, and the uncertainties surrounding permanent urban residence.

¹¹A. Bose, *Studies in India's Urbanisation 1901-71*, Tata McGraw Hill, New Delhi, 1973.

The Use and Availability of Credit

It was clear from the survey that each owner household had had to invest *some* money, even if it were as little as Rs. 50 to Rs. 75. For an unskilled daily wage labourer, even such small amounts can be hard to accumulate. This can lead to heads of households having to borrow money from any available source. Institutional credit is almost inaccessible to the poor. Thus 21 per cent of the owner respondents in the survey had obtained credit from relatives, friends or moneylenders; only 1 per cent had received small government loans. Although informal credit can be obtained interest free or at negligible interest rates on the basis of kinship ties in some communities, those for whom this is impossible often have to pay exorbitant rates. More than half the respondents who had to borrow money informally were paying between 48 and 144 per cent on their borrowings, the rate from the banks being only 6-8 per cent. Of those who had received credit at the highest rates (120-144 per cent), almost all had the lowest incomes (Rs. 250 and below). Such usurious practices are common in backward rural areas. The evidence of their existing in the residential areas of even a 'modern' city such as Chandigarh reflects the continuing heavy social and economic odds against the rural migrant.

Non-monetary Investment

The financial investment in housing discussed so far by no means represented the total investment made by households, and the generally costs had been achieved in two additional ways. First, there was the use of second-hand or waste materials either acquired cheaply from wholesale *kabadi* (waste) dealers or simply picked up from rubbish heaps or building sites. Secondly, there was the considerable investment of the households' own labour.

The Acquisition of Building Materials

More than half the households had used at least some waste or second-hand materials, such as corrugated iron sheets, timber packing crates, bricks and brick bats, which they had obtained free of cost. The difficulty of acquiring even these materials free is reflected in the fact that only one respondent had been able to build his structure entirely from materials obtained free. This is significant in indicating that even the most rudimentary hut costs something in the monetarised urban economy. Thatch has to be paid for as it does not grow wild in the city and has to be transported from outside. Also in the overall economy of scarcity has resulted in waste and used materials being drawn within the orbit of the market so that they have become difficult to obtain for those of limited means. Thus almost half the respondents had bought *all* their building materials. Those with the lowest incomes and unskilled occupa-

tions had resorted to greater use of waste and free materials, as had those not intending to stay in the city or who were undecided.

Centres for Buying Building Materials

The widespread practice among the respondents of buying building materials from non-plan commercial markets and centres illustrated the strong relationship between non-plan residential and commercial developments in Chandigarh. Cheap and second-hand building materials and commodities such as bamboo, thatch and timber crates could more or less only be obtained in Bajwada, (a major non-plan commercial centre till 1975) or from the wholesale *kabadi* dealers working from some of the settlements. Other materials such as rough timber beams, although obtainable from the planned centres, tended to be cheaper in Bajwada because of the much lower overheads of the dealers there.

A third of the respondents had bought all their building materials from the non-plan commercial centres and 90 per cent had bought at least some there. Those with authorised plots had made greater use of the planned centres, but only 10 per cent of the total had bought all their materials there.

The Use of Self-help Labour

More than 80 per cent of the builder respondents had used some household labour in building their dwellings, but two-thirds of the total household had made use of some hired labour. This is significant in so far as it is commonly assumed that dwellings in unauthorised settlements are constructed by the 'squatters' themselves.

The factors influencing the use of self-help construction appeared to be strongly linked to the households' economic status and stage in the slow process of expressing commitment to permanent residence in the city. Of the different occupational groups, unskilled manual workers had made the greatest use of self-help, followed by those in the general services category. The progressive decrease in the percentage of those who had used self-help with the increase in the income group of the head of household reflected its being largely a matter of economic compulsion. This was further reinforced by the fact that a significantly higher proportion of households with women workers had used only household labour and (the correlation between low economic status and women workers was noted in part II). Many other households who had used no hired labour consisted of recent and younger migrants, whose dependents were still in their places of origin. In their case the greater use of their own labour was largely an indication of their lesser commitment to permanent residence in the city and their uncertain economic circumstances.

Contrary to normal assumptions, making even simple thatch roofs requires considerable skill. Thus if self-help is divided into skilled labour

(for example, carpentry work with cement and making thatch roofs) and unskilled labour (for example simple manual assistance such as lifting materials and making mud mortar), nearly 40 per cent of the owner households had been able to provide only unskilled labour and only 8 per cent totally skilled labour, while more than half had provided a combination of the two. Thus inevitably a large proportion of the unskilled and poorest builder respondents had had to hire skilled labour at least to make the thatch roofs for their huts. Their precarious economic circumstances, the frequent demolition of their huts or demands, as under the present resettlement scheme, that they move and build again, can result in some of the poorest households getting into debt on crippling terms of repayment. Many who prefer to avoid such debts try to rely on their own labour with the result that their dwellings are of very low standards and often positively dangerous.

When questioned about their preference if asked to move from the settlements by the authorities, more than half the respondents who had contributed some at least of their own labour preferred to be allotted government-built housing units on a hire purchase basis (emphasising that the repayment instalments had to be within their means, see Table 6). The fact that only a little over 30 per cent showed a preference for being allotted land on which to build was a clear indication that the romanticised notion of 'dweller control' or a rejection of public housing was not a choice the respondents would have made had the option been available to them.

TABLE 6 RESPONDENTS* BY TYPE OF SELF-HELP LABOUR USED AND PREFERRED ALTERNATIVE IF ASKED TO MOVE

<i>Type of labour</i>	<i>Own land on which to build</i>	<i>Pucca tenement on rent</i>	<i>Pucca tenement on hire purchase</i>	<i>No response or not applicable</i>	<i>Total</i>	<i>Percentage</i>
Only unskilled	15	0	47	6	68	38.8
Only skilled	5	0	7	2	14	8
Skilled and unskilled	35	8	47	3	93	53.1
Percentage.	31.4	4.5	57.7	6.2	100	—

*Respondents who were tenants, had bought their houses or had not contributed any of their own labour have been excluded.

This conclusion was substantiated by the scramble for pucca tenements by the households in the Industrial Area labour colony under the present resettlement scheme, and this despite the fact that the tenements

are on a monthly licence basis when only 4.5 per cent of the respondents had indicated a preference for rental accomdation. A difference in the security of tenure between the pucca tenements and the transit sites cannot be a major reason for the difference in demand for the two as in both cases the security is dubious and highly unfavourable for those being resettled.

The arguments being put forward by those affected by the resettlement scheme against the transit sites were that, in addition to their limited financial means and technical capabilities, they simply do not have the time or energy to build their own houses. Even the older dwellings built on authorised plots reflect these limitations. The arguments interpreting the low standards of construction in typical non-plan settlements as reflecting the 'needs' and 'priorities' of the households living in them do not take into account the fact that no sane person 'needs' to live in a dwelling which leaks during the rains, or whose walls may collapse any time. People are *forced* to live in such circumstances.

Maintenance Costs

In addition to the costs of building, the quality of construction and the types of building material used entail disproportionately high recurring costs on maintenance in relation to the total capital cost. Thatch needs replacing every second or third year. Rough timber beams or bamboo are eaten by white ants. Roofs blown off during wind storms or walls collapsing during the monsoons require reconstruction. The majority of households were spending between Rs. 10 and Rs. 200 per year on such maintenance, and such recurring costs can result in little incremental improvement despite incremental investment because each new investment simply goes into replacing something rather than adding to the total capital accumulated in the dwelling.

According to a crude estimate, the total investment in the structures in all the non-plan settlements in Chandigarh*, housing about 15 per cent of the city's population, was about Rs. 9.38 million. This has to be seen in relation to the present estimated value of Rs. 1,023.3 million of just the private residential building in the planned part of the city where the number of dwellings was only two and a half times that in the non-plan settlements.¹² Such difference in value demonstrates the absolute scarcity of investment surplus in the settlements.

*Total monetary investment in dwellings made by owner households in the survey was Rs. 2,07,359. Adding 13 per cent for investment in rented houses gives a total of Rs. 2,34,314 for 5 per cent of the total households in the settlements and thus Rs. 4.68 million for the total. Allowing a further 100 per cent on this figure for inflation and self-help labour gives Rs. 9.38 million at 1974 prices.

¹²Chandigarh Administration, Department of Finance, *Draft Proposals, Fifth Five Year Plan (1974-79)*, 1974, Chandigarh.

Although it has frequently been argued that such non-plan housing investment represents very large sums in absolute terms, particularly in the relatively more affluent Latin American countries, the absolute figures can be very misleading by themselves. The relatively smaller investments made by large sections of Third World urban populations compared to those made by small proportions of their wealthy minorities, only serves to demonstrate that the vast majorities of their populations do not control the bulk of national resources. On the contrary, the poor quality of building materials and the technically inferior building methods and processes they are forced to adopt mean that they obtain extremely poor returns from their investment. The life spans of some of the older and better quality dwellings in the labour colonies had already reached their end at the time of the survey, leading to many households living in dangerous conditions.

Potential for Additional Investment

The extent of labour, time and capital invested in housing did not necessarily reflect the full potential of the households in the survey. A major factor inhibiting greater investment was insecurity of land tenure. Nearly 90 per cent of the owners indicated that they would have improved their dwellings had they had greater security.

Asked what improvements they would have made if they had security of tenure, the majority indicated that they would have tried to improve the structures and to make them 'pucca' (see Table 7). Their second priority was to increase covered space. The concern to improve the quality of their dwellings did not indicate any great ability to bring about spectacular changes but a desire to eliminate some of the recurring maintenance problems and the hazards of fire and collapse. For a household with limited means, even making a change from a thatch roof to one of mud on timber boarding can represent a major financial commitment.

Space Standards

In terms of the number of rooms per dwelling the range of covered space available to households in the survey varied from one to a maximum of six rooms, with some three-quarters of the households living in one—or two-roomed dwellings. However, the picture was not much different in this respect from the planned part of the city (see Table 8) where there was only a slightly greater proportion of households with four or more rooms. Taking six of household into account, the settlement households were living in slightly greater conditions of over-crowding (2.1 persons per room in the whole city and 2.5 persons per room in the settlements). In the case of the settlements there was a more direct relationship between household size and the number of rooms per dwelling than in the whole city.

TABLE 7 IMPROVEMENTS WHICH WOULD HAVE BEEN
MADE BY RESPONDENTS IF SECURITY OF TENURE
HAD BEEN GRANTED*

	<i>Number</i>	<i>Percentage</i>
Would make dwelling pucca	67	27.8
Would add more rooms	25	10.4
Would make dwelling pucca and more rooms	82	34
Would have improved dwelling generally	27*	11.2
Could not afford to make any improvements	33	13.7
Any other	7	2.9
TOTAL	241	100
	(72 per cent of sample)	

*Eight said that security of tenure would have enabled them to get a loan from the government with which they could have effected improvements. Tenants have been excluded.

SOURCE: *Field Survey*, 1974.

TABLE 8 DISTRIBUTION OF HOUSEHOLDS BY NUMBER OF
ROOMS PER HOUSEHOLD FOR THE WHOLE CITY/AND
FOR THE NON-PLAN SETTLEMENTS

<i>Number of rooms per household</i>	<i>Chandigarh city* percentage</i>	<i>Non-plan settlements† percentage</i>
One	38	42.3
Two	34.6	32.5
Three	14.7	16.8
Four	6.4	5.9
Five and above	6.2	2.2
Unspecified	0.1	0.3

SOURCE: * *Census of India*, 1971, Chandigarh, Housing Report and Tables.

† *Field Survey*, 1974.

These relationships, however, have to be regarded with a degree of caution as they do not reflect the actual area available to different households. The average per household in the settlements was about 200 square feet and the average per person about 42.5 square feet; unfortunately comparable figures were not available for the city as a whole.

This picture of overcrowding does not depict the totality of the situation in the settlements. To a considerable degree, the discomfort was minimised by the widespread use of outdoor space for a variety of

purposes, and almost 80 per cent of the households were using some outdoor space. The single-storeyed construction of dwellings allowed virtually every household to carry out at least some household activities outdoors and cultural factors and traditional living habits, as well as climatic conditions facilitated this.

From the point of view of improving conditions of overcrowding, when covered space is inadequate, access to outdoor space is very significant. For those having to cope with desperately scarce resources, the function of covered space is often reduced to that of providing a lockable store for household possessions and for activities demanding privacy. Particularly during the extremely hot summers, the ability to sleep outdoors becomes a definite asset, and is much more comfortable and healthy than several people sleeping in an ill-ventilated room.

In this respect the residents of the settlements were probably better off than their counterparts renting cheap private accommodation in the planned residential areas as the latter is mainly available in two or three-storeyed buildings. Those living on the ground floors can probably also make use of outdoor space, but those on the first and second floors have to live in far greater discomfort, particularly if without access to balconies or roof terraces. □

Squatters and Settlers in Poona: A Case Study of two Hutment Settlements

MEERA BAPAT

IT IS well recognised now that public intervention in the field of housing in India has proved grossly inadequate. Our cities bear vivid testimony to the widening gap between aspirations expressed in our five year plans and actual execution of housing programmes. Public housing is "too costly entirely because it sets itself a standard of durability and quality of construction and amplitude of amenities which the majority of city dwellers do not possess and cannot afford."¹ The preoccupation with structural quality, space standards and financing of individual units is itself one of the impediments to progressive and imaginative discussion in this critical field of urban planning.² Insistence on minimum standards of accommodation leads to a high level of investment in house construction which cannot be sustained if all the people are to live in dwellings built to specified minimum standards.³ Because of the high cost of construction of even such 'minimum' dwellings relative to the income of the poor, a high level of subsidy is required in order to bring the repayment charges or rent of these dwellings within the means of poor households.⁴ Given the acute housing shortage even for middle and upper income households in cities and because of very low incomes of a significant proportion of the residents of subsidised housing units, the result is "dispossession of the poor and deserving by people who are better off and are able to buy out the original allottees by resort to subterfuges like sub-letting; the poor are then back in their hovels".⁵

¹D.R. Gadgil, "Housing and Slums in Poona", *The Economic Weekly*, Vol. XI, No. 14, 1959.

²Colin, Rosser, "Housing and Planned Urban Growth—The Calcutta Experience", in Michael Safier (ed.), *The Role of Urban and Regional Planning in National Development for East Africa*, Milton Obote Foundation, Kampala, 1970.

³National Committee on Science and Technology, Government of India, "Critical Issues in Formulating Housing Policies for Developing Countries", New Delhi, 1975, mimeo.

⁴J.B. D'Souza, "Housing for the Forgotten Man", *Hindustan Times*, July 3-4, 1975.

⁵*Ibid.*

There is unequivocal evidence that as presently constituted and operated, public housing programmes are incapable of grappling with the urban housing problem. Yet, no significant attempts have been made to formulate realistic and relevant policy measures. It is not the case that the problem of housing for the urban poor is unrecognised or that there is no awareness of the gross inadequacy of prevailing standards and procedures. What is lacking is a persual of vigorous strategies in the field of urban housing and this can come about only with a more rational organisation of the resources of a city and the fulfilment of collateral requirements of urban development, appropriate planning legislation and land policy.

Faced with the rapid and 'uncontrolled' proliferation of hutments in cities, government introduced in early 1970s a programme of environmental improvement in hutments as part of the 'Minimum Needs Programme'. The stress now is on slum improvement which has a limited objective of providing some relief in the appallingly wretched environmental conditions in hutments. It is seen only as an interim palliative. Evidence shows that in spite of legislation regarding slum improvement, urban local administration does not and cannot undertake a systematic plan of action.⁶ In addition to bureaucratic delays, one of the major hurdles in executing slum improvement work is the question of ownership of land occupied by squatters. Treated only as a short term measure until all the urban poor can be accommodated satisfactorily in public housing units, the environmental improvement programme finds it unnecessary to resolve key issues like the need for reformulation of town planning norms and building regulations, and distribution of urban land which are central to the improvement in the housing situation.

Self-help housing or the provision of site and services instead of tenements is often mentioned in government policy discussions as a measure to arrest further deterioration of the urban environment. The need for such a programme seems to be expressed owing only to the inability of government to provide subsidised housing for the mass of the urban poor rather than, additionally, on the basis of an exploration of their actual and potential contribution in ameliorating their own shelter and environment situation. Without such an analysis the programme cannot be designed to include the necessary scope of measures and impetus to sustain a process of gradual improvement for all.

In the present situation, the low-income population which is denied access to authorised housing by cost and locational considerations, establishes settlements outside the framework of city plan. The illegal status of such settlements exposes them to insecurity, exploitation and a

⁶Meera Bapat, *Housing and the Urban Poor: The Poona Experience*, Development Planning Unit, London, 1977 (mimeo).

range of limitations. At the same time, this housing alternative displays features which must become integral part of a housing policy if it is to have relevance to people's means and needs. I intend to define these components by using the example of shanty dwellers in Poona and by contrasting a squatter settlement with an official site and services project.

The population of Poona within the limits of Poona Municipal Corporation was well over a million in 1981. A third of its population is now estimated to be living in hutments, as against only 12 per cent in 1968.⁷ The distribution of basic services such as protected piped water supply and the provision of latrines is very uneven. A significant proportion of the population has to share a water tap and a latrine between several families and a large section of the population particularly that living in hutments has no access to either.

A survey of seven hutments settlements which represent a system of such settlements in the city⁸ reveals a number of characteristics which need to be carefully analysed in order to design a feasible and relevant housing policy. An overwhelmingly large proportion of the hutments population consists of first generation in-migrants. However, 15 per cent are Poona natives or have been in Poona for at least two generations. Nearly 38 per cent belong to what is officially termed 'backward classes'. This proportion is far higher than that in the city population as a whole. Almost all the households are family based. A significant majority came from drought-prone areas in Maharashtra and were landless labourers at the place of origin. The ratio of 910 females to 1000 males in the hutment population is more balanced than that for the city as a whole and is closer to all India and Maharashtra average in 1971 of 930 females to 1,000 males. This is in contrast to the situation in the metropolitan cities of Bombay, Calcutta, Delhi and Madras where there is preponderance of males over females. The case of Poona hutments demonstrates that to base housing strategies on the assumption of a uniform pattern of predominantly male migration to cities seems misguided.

Less than a fifth of the families send remittances back to the place of origin. Many maintain social links but only a minority keeps economic links with the home area. Almost all the households regard their stay in the city permanent inasmuch as they have little possibility of retreat or return to the place of origin.

This need not be interpreted as an expansion of urban opportunities for individual improvement. Although hutment population is of long-standing residence in the city, longer urban experience does not

⁷Poona Municipal Corporation, *Survey of Shanty Settlements in Poona*, 1969 (in Marathi).

⁸Meera Bapat, "Shanty Town and City: The Case of Poona", *The Progress in Planning*, Vol. 15, Part 3, Pergamon Press, Oxford, 1981.

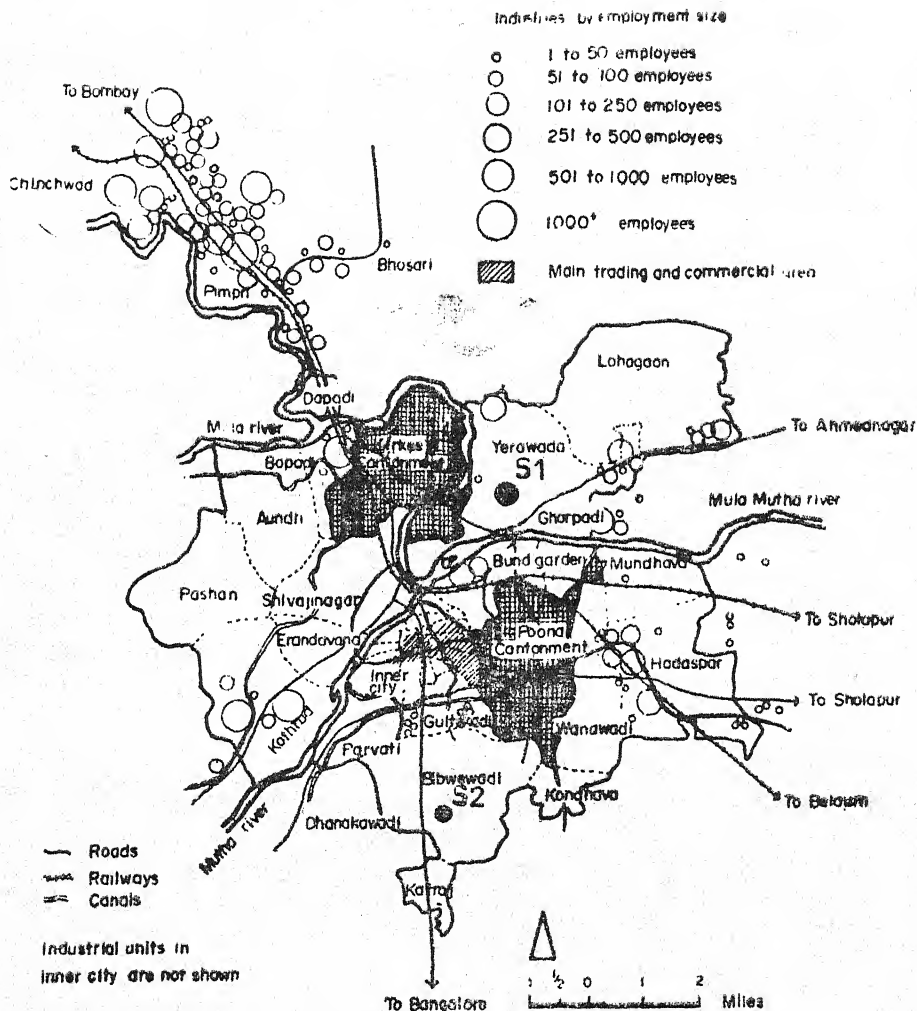
ensure access to stable and formal sector employment. The hutment population comprises two non-competing groups. The first group is employed in urban modern or formal sector jobs mainly owing to the advantage of higher level of education, relatively high status in the caste hierarchy and consequently social contacts with those in formal employment. Firstly, in the situation of excess supply of applicants for jobs, education is used as a screening device to select candidates. Secondly, jobs are obtained through contacts and 'brokers' tend to favour those within their own social network.⁹ On both these scores a large proportion of the poor find themselves in a disadvantaged position. Being poor and socially underprivileged they can seldom afford the cost of schooling, nor do they have any tradition of education. If living in rural areas they are compelled to migrate to cities on account of their poverty. They are effectively barred from stable formal sector employment in the urban labour market owing to lack of qualifications and contacts. What other evidence there is apart from that of hutment population in Poona, notably that of Bombay also suggests this pattern of discrimination.¹⁰ Whatever occupational mobility there is occurs largely within the urban modern or formal sectors and within the urban traditional or informal sector. Inter-sectoral 'graduation', from urban traditional to urban modern jobs is possible only in a very small number of cases. Although graduation from miscellaneous tertiary jobs to formal permanent employment is not possible with longer urban experience alone, a small degree of advance in terms of income and types of occupation is made with longer duration of stay in the city. In spite of the definite limits to the range and magnitude of individual advance, hutment dwellers improve their shelters over time and on the basis of existing income levels and their own labour. The results are in no way spectacular; the progress of improvements is slow and in most cases restricted to the rudiments of construction, but is nonetheless clearly perceptible on close examination.

With this background it is now possible to draw conclusions in order to define a relevant housing strategy from a comparison of an unauthorised, spontaneous settlement (Ganeshnagar) and an official site and services scheme (Bibwewadi) sponsored by the Poona Municipal Corporation. Both these settlements were included in the survey mentioned above.

Ganeshnagar is situated in the north-east suburb of Yerawada on approximately 10 acres of government-owned land. Begun after 1968 it grew exceedingly rapidly and already in 1976 had a population of about

⁹P. Collier, "Labour Mobility and Labour Utilization in Developing Countries", *Oxford Bulletin of Economics and Statistics*, Vol. 37, No 3, August, 1975.

¹⁰H. Joshi, *Surplus Labour and the City: A Study of Bombay*, Oxford University Press, Delhi, 1976.



POONA MUNICIPAL CORPORATION

S1—Ganeshnagar

S2—Bibwewadi Site and Services Scheme

8,000. It now houses nearly 9,000 people (which means a density of about 900 people per acre as against officially specified maximum density of 60 families or about 300 people to an acre). Several households have moved to this suburban location from inner city overcrowded authorised housing. Left without a possibility of finding affordable and authorised accommodation, they chose to move to this settlement.

It is one of the most neatly laid out unauthorised settlements in the

city with dwellings properly aligned along pathways and with a well maintained and clean environment. The Poona Municipal Corporation has built open gutters along concreted pathways and provided communal latrines and water taps.

Ganeshnagar is a remarkable case of community organisation. Co-operation and community participation are the key factors which underlie the orderly development and effective management of the settlement. Being on government owned land, the residents are not exploited and fleeced by private land owner, neither do they feel very vulnerable to eviction. Since 1970, there is an active council which is democratically elected once in 3 years by adult franchise. The settlement is divided into nine wards and each ward has one representative on the council. This ensures that there is no over-representation of any part of the settlement in the council.

From the early stages of the development the leadership saw to it that dwellings were built in an orderly manner. A small area was cleared and left open as community space. The council organised the community to agitate to press their demands for basic services. Having got the services from the Poona Municipal Corporation in 1975, the Council has made sure that they are used and maintained properly. Experience generally shows that the provision of communal services rarely improves the sanitation situation in hutments. Ganeshnagar has proved to be an exception. Each dwelling displays a disc on its entrance showing the number of the house and the ward. This is in contrast to most other hutments where shanties appear to form a confusing maze.

The Council is not merely concerned with maintaining sanitation and celebrating various festivals; with self-help the community has built a kindergarten for the children in the settlement. A special school for deaf and dumb children has also been established recently for children in the area and is funded by contributions from the community. (A year after its establishment it will be partly funded by the Social Welfare Department of the state government.) The case of Ganeshnagar demonstrates the importance of voluntary organisations at settlement level to achieve significant improvements in the physical and social environment.

The officially sponsored Bibwewadi scheme lies near the southern periphery of Poona. In 1970, when the site was developed, it was in a desolate area and far removed from the built-up area of the city. Since then, however, residential development is rapidly approaching the Bibwewadi site and services scheme and public transport has started serving the area.

The Municipal Corporation has built here 500 concrete bases, each measuring 10'X15', neatly laid out in rows with ample open space around each base. There are communal latrines, bathrooms and water taps on the site.

The first group of hutment dwellers was moved to Bibwewadi in 1971 when the land which they occupied, about 3.5 miles north of this site, was acquired for a bridge. In 1975 another group was resettled here after being evicted from their settlement about 2.5 miles north of Bibwewadi. A few months later a third group of hutment dwellers from further north of the city was moved down to this southern location. None of these families was offered any alternative site.

In 1974 the Poona Municipal Corporation invited architects and engineers to build low-cost 'model' houses on the concrete bases, to be copied and reproduced on a large scale. Seven experimental houses were built. Owing to their high cost relative to the accommodation and the level of comfort and amenities provided, none of them has been found worthy of repeating on any scale, both by the Municipal Corporation and by the households who have been shifted to Bibwewadi. The 'model' houses were rented or sold to members of municipal staff in 1976.

There are 300 families living at Bibwewadi. They recognise that the move to this official scheme has improved their environmental conditions; there is open space and ample provision of basic services. They appreciate the advantages of a concrete base over the often damp floors of their previous dwellings. Many nevertheless complain about the rent (Rs. 18 per month) which they find high compared to the accommodation provided, and unanimously express their preference for a proper dwelling. A considerable number of the tenants have failed to pay rent even for their mere concrete bases and have been served eviction notices for default in the payment of rent. Another grievance relates to the distance they have to travel, in most cases on foot, to the place of work.

It is incorrect to interpret their 'preference' for a proper tenement to just a 'site' as an indication of the unacceptability of the concept of site and services schemes *per se*. It is likely that their hostile reaction stems from the coercion that was used in shifting them to this site without offering them any alternative location. Moreover, against the background of repeated election pledges by politicians to provide 'housing for the poor', it is not surprising if they feel cheated in being given mere sites and no houses.

There is no formal community organisation of residents of the Bibwewadi scheme. There is no attempt to keep the environment clean. Residents often complain about blocked latrines and general lack of proper maintenance of sanitary facilities by the Municipal Corporation.

A detailed comparison of these two settlements highlights a number of positive features of the spontaneous settlement established by the

people to suit their needs and brings into focus severe limitations of 'official perception' of the needs of the poor.

Both the settlements have a significant porportion of long-term in-migrants; neither of them has more than a third of the in-migrants from drought-prone districts in Maharashtra. The caste and religious compositions of the two settlements are also similar, with relatively low proportions of 'backward' class' members and neo-Buddhists and a larger proportion of Marathas than the other sample settlements. In other words, the two communities have similar lengths of urban experience and relatively less disadvantaged circumstances socially.

The occupational structure, however, of earners in the two settlements is totally different. In Ganeshnagar, 65 per cent of them are in industrial, service or skilled jobs and only a small proportion works as casual labourers. Bibwewadi has a third of the earners as casual labourers and only a fifth of them hold formal and regular jobs. Only 11 per cent in Ganeshnagar have to move around the city depending on where they find work; others have fixed locations of jobs. In contrast, a third of the earners in Bibwewadi have no fixed place of work and depend on the informal inner city job market and 36 per cent work at various inner city locations. The chief mode of transport for the earners in Ganeshnagar is bicycles (40 %), and more than 13 per cent use public transport. In Bibwewadi, however, less than 20 per cent use bicycles and public transport while 67 per cent of the earners have to walk to work. It is evident that a very small minority in Ganeshnagar is dependent on informal city jobs; a significant majority has fixed job locations and higher mobility owing to the use of bicycles and public transport; residential location near the job market or close to the place of work is not of crucial importance to them. In Bibwewadi, however in spite of greater dependence on inner city formal and informal jobs and their inability to afford any mode of transport other than walking to work, they were shifted so far away near the southern periphery of the city.

Bibwewadi is a site and services scheme initiated by the Poona Municipal Corporation. The choice of the location of the project was guided primarily by the availability of cheap land owned by the Municipal Corporation on the periphery of the city. The households were shifted here from three different settlements in the city; regardless of their preference for an area affording access to economic activities and other considerations important to them. Ganeshnagar, on the contrary, is a location selected by the residents themselves within the limited choice available. It is convenient for access to work places from the view point of a significant proportion of the earners.

There is a marked difference in household income in the two settlements; 63 per cent of the Ganeshnagar households earn more than Rs. 300 per month, while in Bibwewadi only 33 per cent earn above that

figure. Similarly, individual and per capita incomes are far higher in Ganeshnagar than in Bibwewadi.

Considering the security of tenure which the Bibwewadi residents enjoy, it would be reasonable to expect to find upgradation in the housing, particularly in the case of those who were shifted there in 1971. In reality, however, very few have improved their shelters since they were first moved there. In Ganeshnagar, on the other hand, over a third of the households have carried out a wide variety of modifications and improvements to their dwellings, and that too without firm security of tenure of land.

The majority of housing in both the settlements is built from similar materials, mainly rough wooden slats, galvanised iron sheets and clay tiles. The dwellings in Ganeshnagar, are, in fact, relatively better constructed and maintained. Approximate cost of a 10' x 12' room in Ganeshnagar was Rs. 1000 (galvanised iron sheet walls and roof), Rs. 1,500 (asbestos cement sheet roof) and Rs. 2,000 (Mangalore tiled roof). In Bibwewadi, initial investment in housing has been much less, neither have they been significant shelter improvements over time.

As squatters on government owned land, almost 70 per cent of the Ganeshnagar residents who live in self-built shanties do not pay rent. Of the rest who live in rented accommodation, 7 per cent pay Rs. 15 per month, 20 per cent Rs. 20 per month and 3 per cent Rs. 30 per month. In Bibwewadi all the tenants living in self-built houses are charged Rs. 18 per month; those who have rented 'model' houses pay Rs. 30 per month.

The secure tenure of the Bibwewadi households has not encouraged 'pucca' construction. About 70 per cent of the dwellings have been built to the full extent of the concrete base of 10' x 15' the rest occupy up to half the areas of the base. In Ganeshnagar, the variation in the dwelling area is much greater—from 60 sq. ft. to 250 sq. ft. with 60 per cent shanties of 100 to 200 sq. ft. area; the flexibility allows room for house building to suit the economic capacity and the space requirements of the household.

The Bibwewadi residents probably enjoy an improved environment as compared to their previous settlements. They do not seem to have benefited from the move to the present site in any other way. Many of them have unsteady jobs and very low incomes; by and large they are in no position to take advantage of the security of tenure and build over time permanent structures for dwellings. Given the nature of their economic activities and limits to advance in the present conditions, further improvements in their dwellings are unlikely. Vacated concrete bases eloquently tell the tale of households who failed to pay the rent, or who considered too high the cost of staying away from the job market, and moved elsewhere, probably closer to the city.

Despite steady jobs and regular income, most of the Ganeshnagar residents cannot afford to pay for authorised accommodation. The rents of such accommodation as may be available are generally very high and the cost of construction of even the minimum accommodation built to officially acceptable standards is prohibitive in relation to their paying capacity. At Ganeshnagar they have created a viable alternative in the form of an orderly, clean settlement and a cohesive community. What they have achieved so far is without adequate legal backing since they are still squatters. Although their houses are below official standards of construction and accommodation and have much higher density than what is officially permitted, they are neither unhygienic and unsafe, nor do they make an oppressively congested environment. They form adequate shelters of the kind the inhabitants can afford, build, repair and maintain by themselves. With effective community participation and organisation they maintain a sanitary environment in the settlement. Clearly, the case of Ganeshnagar embodies a range of measures which can help low-incomes settlement in place of building regulations and town planning which, in the name of creating a 'safe' and 'hygienic' environment, deny an increasing proportion of the population access to adequate housing and basic services.

In this context, the design and concept of 'model' houses as at Bibwewadi needs to be critically assessed. These 'model' houses are based on technology conventionally used by professionals utilising bricks, cement and steel. Whatever economy that is possible is achieved by cutting corners in specifications. Even then the cost of construction is too high to suit the size of purse of a large majority of the poor and as compared to the level of comfort and amenities provided. As against these, there are examples of houses both at Ganeshnagar and at Bibwewadi which can serve as a model which fulfils the individual requirements of different categories of low-income families. Reduction in cost is achieved by self-help and the use of various materials including industrial waste, and reject and recycled materials, in different combinations to suit the individual needs and financial ability. Regular repairs and maintenance are part of the process of keeping houses in habitable condition.

One particular house built by one of the residents at Bibwewadi needs to be specially mentioned. By careful planning the owner has built a simple but highly functional and efficient house at less cost than some of the 'model' houses on this site using similar material, bricks and lime mortar, for construction. He has not only planned every square inch of available space properly (to include a small bathroom, a water storage tank next to it with a tap opening into the bathroom and a small well planned kitchen) but has also built a mezzanine which gives him double

the floor area of the concrete base and also cuts down heat transfer from the galvanised iron sheet roof. The cost of the house has been brought down by using old building components and self labour.

Admittedly, only a small number of self-built shelters show such careful planning, but they raise questions about 'model' low-cost houses designed by professionals and also about the basis of minimum standards prescribed in building bye-laws. Given the shortcomings in the quality of shelter which people put up autonomously, model houses could usefully deal with construction using materials traditional to shanty building in cities in order to make dwellings more comfortable and hygienic. The key factor is simplicity and ease of construction which puts it within the means of the poor. It is possible to make innovations in design which make shanties adequate shelter but which involve very little additional resource use. Some research has already been undertaken in this field,¹¹ but it is addressed almost exclusively to the question of rural housing. It is pure romanticism to regard rural dwellings as acceptable and urban shanties as an eyesore.

Given the income distribution of the urban poor and definite limits to occupational and income improvements, it is essential that technical innovations suit the needs of different income categories. Starting with very inexpensive means of improving shelter, they could include, for relatively better paid, a range of building components which are easy to assemble and which can be bought and used a few at a time to suit the individual purse.

Hutments provide shelter to low-income population in our cities. They exist completely outside the town planning frame-work and as such are exposed to severe limitations. If they are accorded legality and a conducive framework in order to encourage their promising features and check their shortcomings, it will make possible much more than a relieving change in our urban environment. The approach that involves complementing the efforts made by the poor is possible only if urban administration looks upon its function in terms of not merely controlling

¹¹Waterproofing mud walls by spraying a bitumenous paint can render them free from maintenance needs for 5 years at a modest cost, while treatment of thatch can make it fireproof and prolong the life of the roof. See N. Verma, "Materials and Technology for Rural Buildings"; *Seminar on Technology for Rural Development*, Allahabad Polytechnic, Allahabad, 2-3 July, 1977 (mimeo). and D. Mohan, and N., Verma, "Construction Materials and Technology for Building and Industry in Rural India", *Journal of Industry and Trade*, 29 (11, 12), 1977.

A team in Poona University is developing panels from the residual waste in bio-gas plants. The panels are light-weight and inexpensive; it would be possible to work out their uses after the panels are tested to determine their characteristics. They might be found useful as wall panels, for partitions for false ceiling under galvanized iron sheet roof. (Information given by Professor M.R. Bhiday, University of Poona.)

city development but facilitating it. Above all, the question of shelter for the poor is inextricably tied up with rational and equitable distribution of a city's resources. The pertinent question is how far are our policy makers prepared to go in this direction. □

Urban Housing Processes and the Poor: A Case Study of Ahmedabad

MEERA MEHTA*

IN INDIAN Planning, housing has often been paid a lot of lip-service as it forms one of the most basic needs of man, along with food and clothing. However, in terms of planned efforts, housing has received progressively lower priority, since "in cold economic calculations, housing is thought to be a non-productive sector".¹ In India, the overall investment in housing has declined from a high 34 per cent of the total investment in the First Plan to a mere 8.6 per cent in the draft Sixth Plan, with the public sector outlay at a lowly 1.6 per cent.² Thus, the share of resources for housing, relative to total resources has dwindled to alarmingly low levels. To make matters worse, even these funds have failed to make any impact on the housing situation of a large segment of the population. One of the inherent problems in most of the planned efforts at housing is rooted in a misunderstanding of the ultimate objectives of housing policies.³ The usual approach of a 'standard packaged house' completely fails to consider the process of housing. This process refers to the changing priorities for different housing services (location, tenure, shelter, amenities) of different groups of people over time and the constraints which inhibit them from meeting these. The constraints may be individual at the household-level or may be explained by the supply processes which operate in a given urban area. Thus the second aspect of the housing process refers to the social and economic organisation utilised for the production of housing services. The basic premise of this paper is that a better understanding of these processes is a prerequisite for any meaningful policies oriented to housing of the urban poor.

*I am grateful to Prof. Dinesh Mehta for his comments on the paper. I am also indebted to the students at School of Planning and Architecture, who have worked under my guidance and whose works I have largely drawn upon in this paper.

¹Charles Abrams, *Housing in the Modern World*, Faber and Faber, London, 1964.

²Ahmedabad Municipal Corporation, *Revised Development Plan 1975-1985*, Vol. I, 1974.

³Ahmedabad Municipal Corporation, *Report on Census of Slums in Ahmedabad*, 1976.

Hard empirical research in these areas for India is still very scarce. The earlier attempts at theorising and conceptualisations have most often been based on research in Latin American countries only. The approach in this paper therefore remains exploratory. The basic aim is to synthesise the results of a number of more descriptive studies for Ahmedabad and put forward a few initial hypotheses and issues. Subsequent studies to test these and the development of more rigorous policy impact models remain areas of concern.

The next section gives a brief outline of the overall housing situation of the poor in Ahmedabad and the development of low-income housing areas. The subsequent two sections are grouped into the patterns of need, priorities and constraints of the residents of low income housing areas and the nature of supply processes operating in this metropolis based on the different studies available for Ahmedabad.⁴

HOUSING THE POOR IN AHMEDABAD—AN OVERVIEW

Ahmedabad has been and continues to be the leading urban centre in Gujarat. Despite rather moderate population growth, it is a thriving industrial and trading centre. It has contributed to the extent of 16.3 per cent of the total income and 28.5 per cent of the industrial income of the state in 1976-77.⁵ However, the fruits of these developments have been distributed very unevenly across the various socio-economic classes in the city. This is distinctly reflected in the residential and spatial character of the city also. The rich and the poor are almost literally divided spatially on either side of the river. The distribution of utilities and amenities further enhances the conflict, with a lion's share being claimed by the better off sections. Almost 50 per cent of the population which resides in 'slums' and 'chawls', is generally deprived of any access to even the basic water-supply and drainage facilities. This distinctly class character of settlements has evolved over the last five decades in Ahmedabad.

Housing Sub-systems over the Decades

The high population growth following the development of textile industry started in the early part of this century. By 1900, the textiles were employing about 16,000 workers which almost doubled in the next twelve years, to 32,000 textile workers in 1912. Till this time, most of Ahmedabad's population had been housed within the walled city. The major housing type in this area was the 'poles'. These are the traditional

⁴C.C. Benninger, "Models of Habitat Mobility in Transitional Economics", *Ekistics*, March, 1970.

⁵M.P. Bhatt and another, *Anatomy of Urban Poverty, Ahmedabad, Gujarat University, Ahmedabad, 1979.*

housing areas with continuous row of houses on either side of winding *culde sac* type streets and substreets. These are pucca structures with generally two to three storey construction. These were based on caste and community backgrounds and offered residence to families of different economic levels. The rapid development of the textile industry brought a variety of workers to the city, both for the industry itself and the supporting services.

The rapid saturation, and in most cases over crowding of the poles in the old city led to two new types of housing developments. On the western banks of the river Sabarmati, new areas mainly housing the elite were developed. These were low-density developments which emulated the modern British town planning principles. Upper-middle income groups also following suit with a lowering of the assessment rate by the British in around 1910. This encouraged building in the suburbs, and Ellisbridge soon began to develop as a residential area.

In contrast to the developments on the western bank, the eastern belt beyond the old city was developing as an essentially working class area. In the late nineteenth century these newer workers were probably housed in mud and straw hovels which proliferated wherever there was an open space, within or without the walls. However, the municipality had started responding to this situation by building a few model chawls. As it happens today, it soon discovered in a decade that it could not afford to do more. Some of the millowners built chawls for their workers outside the city walls. This new trend of building chawls must have continued as a survey in 1972 by ORG found that 24 per cent of chawls were over 50 years old and another 66 per cent were 25 to 50 years old. Using these age estimates for an 59,000 households in chawls, almost 53,000 households must have been staying in chawls in 1946.⁶ In any case, the rate of construction of new chawls came down sharply from around this date. Between the period of 1921 to 1946 the rate of growth of new chawl areas was around 19 per annum which came down to just 5 per annum in the 15 years period spanning 1946-1961. Later it was down to less than 1 per annum. A large number of these chawls are privately owned (80 per cent). The rest are either owned by institutions (14 per cent) or are owner-occupied (6 per cent). Besides, the industrialists building a few chawls for their own workers, the others were developed by private individuals and rented out to the workers. The situation however apparently changed following the Rent Control Act in 1939. Before this, the investment in chawls was profitable investment and attracted people to enterprise in it as a source of investing their savings. But with the establishment and enforcement of the Rent Act since 1939, investment in low-income housing has ceased to be

⁶Census of India, *Special Report on Ahmedabad City, Gujarat, Part X-A(i), 1961.*

a profitable investment. Most of the chawls built prior to the rent control act were built by private individuals, whereas the latter were developed by the industrialists.

In the initial phase there was probably over-crowding in the existing chawls as the recognised supply of low-priced housing dwindled. Simultaneously, there were developments of hutment colonies (slums) which came up on both private and public lands. To a certain extent, the development of 'chawl' type structures was transferred to this sector through quasi legal arrangements. The nature of developments of these clusters is discussed in more detail in the third section. Along with these slums, the conditions in the chawls worsened considerably due to both overcrowding and a complete neglect by the landlords who presumably found it uneconomical to invest on the maintenance and upkeep of these buildings.

These latter developments of chawls and especially the slums represent the housing of the poor. We have thus put more emphasis on these throughout the paper.

Housing Situation since 1961

The most striking feature of these slum areas is their phenomenal growth in the last two decades. In 1961, the two different estimates put the percentage of slum households at 8.2 per cent and 15.2 per cent. Using the second estimate, households grew by about 88 per cent. In other words, almost 45 per cent of the growth of households in Ahmedabad from 1961-71 was absorbed by these slum areas along.⁷ The trend seems to have slowed down somewhat from 1971 onwards in some areas in the city. This however, only implies the saturation of specific areas, with the developments moving further out. This has happened in the past in the industrial areas. The new developments are occurring mostly in areas just outside the corporation limits near the industrial belt for which, however, we do not have any information at this stage except visual observations.⁸

Corresponding to this growth in slums in the city the overall housing situation in terms of crowding also worsened during the 1961-71 period. (see Table 1). The overall occupancy rate in Ahmedabad increased from 5.3 to 5.5 in 1971. This, however disguises the worsening of the situation in smaller houses. The persons per room ratio for the city increased from 3.11 to 3.22 from 1961 to 1971. However, the increase was totally absorbed by the one-room houses where it increased from 4.35 to 5.14. In the larger houses with two and more rooms there was a consistent decline.

⁷H. Doshi, *Traditional Neighbourhoods in a Modern City*, New Delhi, Abhinav Publications, 1974.

⁸H. Gandhi, *Habitat Mobility Amongst the Urban Poor*, Dissertation, School of Planning, Ahmedabad, 1979.

TABLE 1 HOUSING SITUATION 1961-1971

	1961	1971	Rate of change in percentage
1. Total population	1,149,918	1,591,832	38.4
2. Total households	228,383	294,492	28.9
3. Household size	5.03	5.40	—
4. Total houses	217,984	290,952	33.5
5. Occupancy rate	5.28	5.47	—
6. Households in slums	34,645	65,211	88.3
7. Percentage of households in slums	15.2	22.1	—

- SOURCES: 1. Census of India, Gujarat part X-A (i) 1961 for rows (1) to (5), 1961.
 2. Census of India, Part IV-A and B, 1971, for rows (1) to (5), 1971.
 3. AMC, 1976, Report on Census of Slums in Ahmedabad, for row (6).
 Estimated as per note 8c, estimate II.

At the same time, there are relieving aspects to the picture also, in that the proportion of households in single room houses has come down from 65.3 per cent to 57.5 per cent in 1971. Also, the count of residential houses relative to households increased implying a likely reduction in doubled up households from 4.6 per cent in 1961 to 1.2 per cent in 1971. In an overall perspective, however, the housing situation in Ahmedabad presents a dismal picture with increasing over crowding and a significant increase in households being absorbed by the 'slum' areas.

SLUM EXPLOSION: SOME EXPLANATIONS

Before we look at the nature of processes involved in this growth, we will first explore the possible reasons behind this growth from the macro perspectives of the city growth and the nature of housing response.

Migration and Slum Growth

It is extremely common to put the blame in such cases to the "explosive population growth of large urban centres" on one hand and the predominance of "poor rural migrants" in the population increases. This explanation appears to be a total myth, at least on the basis of evidence from Ahmedabad.

First of all, Ahmedabad exhibits a picture of only moderate population growth relative to other metropolises in India. On the other hand, the growth of the population in slums is more than double the growth of population in Ahmedabad and has been estimated to be 88 per cent to

250 per cent per decade.⁹ It is, however, still plausible that most of the migration based growth of Ahmedabad was absorbed by the slums, which would still render the arguments of poor rural migrants swelling the urban slums incorrect.

For this to be true the rate of in-migration to the city slums should be higher than or equal to the rate of migration for the city and should be growing over time. Although the first aspect is right in that the rate of in-migration to the city slums is a little higher than for the city, the rate has been declining since the sixties. This is borne out by the evidence in Table 2 regarding the rates of in-migration of households. This also shows that the rate of growth of slum households is more than double the rates of in-migration. The difference is also much higher than that plausible by the natural increase. Thus, the slums are not simply being swelled by the in-migration of rural poor. There seems to be downward housing mobility for urban natives also. This leads us to explore two more aspects which may have contributed to the slum explosion in Ahmedabad. The first relates to the possibility of worsening of the economic conditions of especially the low-income groups. Alternatively, or alongside, the causes may lie in a failure of the housing market to respond to the housing needs of the people. We take up these issues in the next two sections.

TABLE 2 GROWTH OF SLUM HOUSEHOLDS AND RATES OF IN-MIGRATION

Year	New huts constructed	Average growth of household p.a.	Average rate of In-migration of Households per annum
1963-67	12,618	6.79	4.78
1968-72	18,987	7.63	3.57
1973-75	12,481	5.17	2.01

SOURCE: AMC, *Report on Census of Slums in Ahmedabad, 1976*, Table 3, p.7. and Table 12, p.15. The rates are derived by treating a hut as equal to a household. There were 37,169 huts constructed before 1962.

Economic Structure of Ahmedabad

The changes in the economic conditions of workers may be studied by looking at the changes in the nature of opportunities provided by the urban economy. Alternatively, one may look at the actual job histories of workers at the lower levels of the urban labour market to discern both the nature of opportunities and the performance in terms of

⁹K.L. Gillion, *Ahmedabad: A Study in Urban History*, University of California, Berkeley, 1968.

changes in the real income. Opportunities in the urban economy must be examined both in terms of the availability of employment in different areas, as well as income generation. The time series data is available only for the first aspect and this is explored further. Using the data from census regarding employment by industrial categories, a few interesting changes are observed. From the results in Table 3, it is evident that the most important changes are with respect to the decline in manufacturing and other services, and the increase in primary activities. However, the latter is of very small magnitude and may be ignored. The over-all growth in the tertiary sector however needs to be examined further, through a study of the changes in the relevant occupations. This only would show whether the growth of tertiary sector has gone to swell the ranks of the workers being 'absorbed' in the so-called informal sector or it represents a dynamic evolution of the tertiary sector.

TABLE 3 PERCENTAGE DISTRIBUTION OF MALE WORKERS BY INDUSTRIAL CATEGORY

	1961	1971	Rate of change
<i>Primary</i>	0.7	1.5	+114.3
<i>Secondary</i>	57.4	51.8	— 9.8
Household industry	2.2	1.3	— 40.9
Other Manufacturing	52.8	47.6	— 9.8
Construction	2.4	2.9	+ 20.8
<i>Tertiary</i>	42.8	46.7	+ 9.1
Trade & Commerce	16.3	20.4	+ 25.2
Transport, Storage & Communication	6.0	7.5	+ 25.0
Other services	20.5	18.8	— 8.3
TOTAL	100.0	100.0	—

SOURCE: *Census of India*.

In any case, the growth of organised manufacturing sector has failed to keep up with the growth of labour force. The registered factory sector, has also stagnated in terms of employment generation. From 1963 to 1972 there was a decline in absolute employment. Even the slight increase since 1972 (2.5 per cent per annum) has failed to keep up with the growth in labour force.¹⁰ The workers are thus most likely pushed into the other sectors, representing an absorptive character of employment.

¹⁰S.P. Kashyap, *et al*, *Facets of an Urban Economy*, Ahmedabad, Sardar Patel Institute for Economic and Social Research, 1980.

Performance of Workers

The overall changes in the economic structure of Ahmedabad seem to indicate some worsening of the relative economic opportunities available in the city. This could be further studied through an examination of the patterns of labour absorption in different economic opportunities at relatively lower rungs of the labour market. None of the available studies had, however, looked at these aspects in detail. The survey done for an on-going study by the author does throw some light on these issues (Mehta, 1981).¹¹ Although, not meant as estimates for Ahmedabad in any sense, these findings do give some exploratory insights into these processes.

We first tried to see whether the worsening of the situation is reflected in the sector of work for workers in the different age groups. Table 4 shows the distribution of workers by age-groups and the broad sector of work. There is a general tendency for younger workers to be more in the informal sector. This, however, may reflect a process in which younger the workers enter the informal sector and the graduate up to the formal sector. We, therefore, checked the sector of work at entry into the labour market of workers over the years.

TABLE 4 PERCENTAGE DISTRIBUTION OF WORKERS BY AGE GROUP AND SECTOR OF WORK

<i>Age groups</i>	<i>Sector of work</i>	<i>Informal</i>	<i>Formal</i>
15-19		6.3	2.7
20-24		18.6	5.5
25-29		12.7	21.9
30-34		18.1	20.6
35-39		14.0	12.3
40-49		18.1	20.6
50+		12.2	16.4
TOTAL		100.0	100.0

SOURCE: As cited in foot note 11.

It is clearly evident from Table 5 that the entry to the formal sector is becoming more restricted since the sixties, as compared to the previous years. These results are however only indicative of the patterns and do not provide estimates for the city. More work on these lines is necessary to clearly be able to identify such labour market links of housing situations.

¹¹M. Mehta, *Results of an On-going Research for Ph.D. Dissertation on Urban Labour Market*, 1981.

TABLE 5 PERCENTAGE DISTRIBUTION OF WORKERS BY YEAR OF ENTRY AND SECTOR OF FIRST WORK

<i>Year of entry</i>	<i>Sector</i>	<i>Informal</i>	<i>Formal</i>
1941-45		55.6	44.4
1946-50		50.0	50.0
1951-55		47.1	52.9
1956-60		86.9	13.1
1961-65		85.7	14.3
1966-70		88.0	12.0
1971-75		75.5	24.5
1976-81		83.3	16.7

SOURCE: As cited in footnote 11.

Supply of Housing in Ahmedabad

Lastly, we look at the possible explanations for the slum explosion from the supply side. As we have seen earlier, the supply of low income housing in the form of 'chawls' started to dwindle around the forties. Our guess is that the initial response was probably in terms of overcrowding in the chawls. Subsequently, the hutment slums began to come up and in 1961 the population in slums was probably between 10 to 15 per cent. From 1961 to 1971 there was a 33 per cent increase in total residential houses as brought out by the census, which is about 73,000 units in absolute terms. However, the contribution of officially recognised housing in this increase could not have been more than 50 per cent.¹² If the trend from 1971 to 1974 is indicative, then most of these must have been with three or more rooms. This generally put these houses well beyond the reach of the lower-income group people. Thus the supply of new conventional housing was totally inadequate and must have contributed to the development of slums. It may be possible to argue, that there was no effective demand for these houses, as 'slum' housing is a better 'solution' for the lower-income groups. This, however, does not seem possible as most of the households in 'slums' also pay rent as brought out below. Also, a new growing type of development is the quasi-legal slum development in which the rents run as high as Rs. 60 to Rs. 100 per month. At this economic rent and using HUDCO's terms for EWS housing these households can well afford a house costing Rs. 12,000. Surely, the failure is on the part of both the public and private sectors to cater to this effective demand.

The supply of housing to lower-income groups could also have been generated in an indirect process of filtering. The houses vacated by

¹²R. Kaushik, *Housing the Urban Poor*, Dissertation, School of Planning, Ahmedabad, 1981.

middle-income groups as they move to newer housing may become available for the lower income groups through such a process. However, even this has most likely not happened in Ahmedabad due to several reasons. Firstly and most importantly, the rate of construction of new houses has been quite low, at about 1 per cent of the existing stock per annum. This probably was not even sufficient to meet the concealed demand amongst the middle-income groups. Along with this there is a growing tendency of vacant houses, the vacancy rate increasing from 4 per cent to 7 per cent from 1961 to 1971, which puts an additional burden on the available housing. The major subsystem from which movement of higher and middle income groups may occur is the poles in the old city. Here there are strong social constraints against any possible filtering.¹³ Also, the tendency for commercialisation of existing houses is increasing. The second sub-system of chawls may inhibit mobility outwards due to two reasons. Firstly the rent control act has frozen rents at extremely low levels and thus acts as a negative inducement against mobility. On the other hand, the appropriate housing opportunities at right prices have probably been not very forthcoming for these families. Generally, however, we do not have enough empirical evidence about these aspects. This thus remains a potential area of research.

NATURE OF HOUSING NEED

The broad picture that emerges from the earlier sections is of a worsening of the economic opportunities and earnings for a large section of the labour force but a greater worsening of the material-legal aspects of the housing situations especially for the lower-income groups. These two phenomenon are most probably causally linked up with the former explaining the housing conditions. The link is in terms of the changing household situations determining the priority for different housing services and also affecting the abilities (mainly in terms of economic capacities) and constraints (in terms of access to information, credit, materials, etc.) A number of case studies for Ahmedabad have explored these linkages.¹⁴

Priorities for Housing Services

The important housing services which are derived from a given housing environment mainly refer to:

- (i) location—associated accessibility to economic opportunities;

¹³M. Mehta, "Objectives of Housing Policies", paper presented at the *Seminar on Housing, Poor and Development*, Ahmedabad, 1980.

¹⁴M. Mehta, Results of On-going research for Ph.D. Dissertation on *Urban-Labour Market*, 1981,

- (ii) quality of shelter;
- (iii) quality of surrounding physical environment;
- (iv) social environment; and
- (v) security of tenure—or length of time the inhabitant may reasonably expect to be able to remain in that housing.

Turner's early conceptualisations put location as the top priority for new entrants to the labour market. Eventually security of tenure gained predominance at higher levels of income and higher stages in the life cycle. However, as Leeds argues, "Since one of the primary causes of squatment growth involves rational strategies relating residence to work area and to cost of transport . . . under conditions of depressed salary—high price ratios, it follows that a large percentage of squatment population will live near enough to their work to walk (thus saving transport costs) and the second largest portion will live within a single bus fare's distance . . . and virtually none with more expensive travel unless other factors are overwhelmingly important."¹⁵ This seems quite true in Ahmedabad also. Singh's work on low income households illustrates this quite well as in very few cases, the work-home travel exceeds a distance of 3 km.¹⁶ Evidence from the author's own study also support the same conclusion as brought out in Table 6. Thus location remains an important consideration regardless of the household situation at the lower echelons.

TABLE 6 PERCENTAGE DISTRIBUTION OF WORKERS BY TRAVEL TIME TO WORK AND MODE USED

<i>Mode</i>	<i>Travel time</i>	<i>1-10</i>	<i>11-20</i>	<i>21-30</i>	<i>30+</i>	<i>Total sample</i>
Walking		49.7	25.8	18.0	6.5	155(100%)
Bicycle		30.0	30.0	22.5	17.5	40(„)
Bus		20.0	20.0	20.0	40.0	15(„)

SOURCE: As cited in footnote 11.

The next important priority consideration according to the above framework is likely to be security of tenure. There, the security does not necessarily imply ownership. It essentially refers to the resident's perception of his ability to continue to reside in a place. An objective assessment of this aspect becomes difficult as due to the prevailing

¹⁵S. Mehta and P. Kulkarni, *Housing Mobility: Location Choice Amongst Slum Dwellers*, Project Report, School of Planning, Ahmedabad, 1981.

¹⁶G. Singh, *Housing Mobility Processes*, Dissertation, School of Architecture, Ahmedabad, 1981.

political climate, security of tenure is *de facto* accepted in most cases. The second important aspect concerns the way this security is obtained. Inevitably, this is a group or community-based process and not really individual. An individual household may obtain security through a change of residence. This in any case is very rare in Ahmedabad where more than 70 per cent of the housing related moves are forced ones. Even the voluntary moves are only in less than 10 per cent of cases for security.¹⁷ My own work for the slum households also brings forth similar results. Munshi's work for different slum clusters illustrates the group process for obtaining security. A slum cluster in the riverbed which mainly housed casual and self-employed workers who had not improved their conditions over time, showed a complete lack of concern regarding obtaining security though location remained of prime importance to them. Although the security is *de facto* present in this cluster today it came to them accidentally and the residents had made no efforts towards it. This was in complete contrast with many slum areas with relatively more 'successful' workers who exerted group pressures and made concrete efforts to gain such security.¹⁸

The social environment of the housing area or cluster, and especially the security of nearness of kith and kin is also an important consideration. As a matter of fact, once the location criterion is satisfied, the next important consideration is generally nearness to known social groups. This in effect happens inadvertantly, as it is possible to gain access in even a 'slum' only if you 'know' other people. This is necessary both for getting information as well as acceptance in the area.¹⁹ In a slum cluster, Dalal-ka-plot, which is developed by a quasi-legal slumlord, the households are tolerating rather high rents and lack of tenure security simply because of the need to be near their relatives for social security.

The above criteria remain important for people regardless of whether they have improved, deteriorated or stagnated economically. Singh attempted to trace the mobility paths of households in slums and public housing.²⁰ He found that once the above criteria are satisfied, there is some relationship between improvement in shelter quality and upward mobility. This is, however, only true for the materials of roof and wall and not size. Singh found that of those families who had improved the quality of shelter, 75 per cent had also been upwardly mobile. However, only 50 per cent of those who had improved their economic situation,

¹⁷G. Singh, *Housing Mobility Processes*, *op. cit.*

¹⁸Rakesh Mohan, "Urban Land Policy, Income Distribution and the Urban Poor", in Charles Frank and Richard Webb (eds.), *Income Distribution and Growth in the Less Developed Countries*, Brooking Institution, Washington, D.C., 1977.

¹⁹V. Munshi, *Popular Housing: Access to and Exploitation of the Resources*, Dissertation, School of Architecture, Ahmedabad, 1981.

²⁰G. Singh, *op. cit.*

had bettered their housing quality. Obviously, then there may be some other important considerations in improving the housing conditions than simply economic improvement. An important consideration may be the perception of security of tenure. Again Munshi's study of Ram-rahim Nagar illustrates this well. The inhabitants of this cluster had initially made an investment of only Rs. 150 to Rs. 250 on very temporary shelters. Once the security of tenure was assured to them, by the Municipal Corporation's taking over of the area, substantial investments were made on new houses ranging from Rs. 750 to Rs. 1,300 by most households. This was regardless of any improvement in the economic situation. In the same cluster, however, a few of the households, which were not assured of the tenure security by the corporation, failed to make any additional investments on their houses despite similar economic levels.

Apparently, the need for some basic services like water supply and drainage and streetlights is also felt by most households. An objective assessment of this is however a little difficult in Ahmedabad for two reasons. Firstly, the provision of services by the Municipal Corporation implies some security of tenure, so that the clamour of services may in fact represent a priority for tenure security. Secondly, the provision of drainage, watersupply and streetlights has been made by the Corporation at almost no cost to the residents in most slum clusters. Thus, once again the demand may be simply to avail of something that is available free. However, this remains a potential area of research for the new development outside the Corporation's boundaries.

The general conclusions which then emerge are that beyond location, which remains of importance to a majority of the households in 'slums', widely varying priorities for other housing services are found. However, for the particular household the housing priorities tend to be quite rigid and inelastic. Our results and findings from these case studies are, however, tentative due to the very small sample sizes. Further work in this area remains of crucial importance to truly understand the nature of housing need for Ahmedabad.

Abilities and Constraints

Given this type of priority framework for housing services, the actual decisions of the households are determined by both their ability to pay for the required combination of housing services and the constraints which inhibit them. The constraints are in terms of a lack of access to housing resources, especially land and credit, information and technical knowledge for improvement of materials, design and layouts.

Ability to pay

Although the popular notions brand the slum dwellers as being far

too poor to afford any housing, it is quite likely that because of the lack of suitable alternatives for housing at the level of effective demand of 'slum' dwellers, they are forced into these situations. More than 65 per cent of the households in the slums and 92 per cent in the chawls pay some rent. The evidence in Table 7 shows that most of the households with more than Rs. 300 household income per month also spend less than 5 per cent of their income on rents. This may suggest that they are forced into this situation as the only alternatives through public or private housing may be beyond their means. Even for the lowest cost conventional houses, the rate of construction is much lower than required forcing the prices up further. In the chawls, this is even more true as a large majority spend less than 5 per cent on rents. Thus, although the ability to pay may not be very high, the existing rents paid are apparently even less than their capacity. Within the slum households, almost 30 per cent pay less than Rs. 10 towards rent. However, only 6 per cent of the households expressed their inability to pay more than this as rent on direct questioning.²¹

TABLE 7 PERCENTAGE DISTRIBUTION OF SLUM HOUSEHOLDS BY PERCENTAGE OF INCOME PAID AS RENT

Percentage of Income as Rent	Income		
	0-300	301-500	501+
0-2.5	3.9	40.5	74.6
2.6-5.0	54.4	43.6	25.4
5.1-10.0	29.6	15.9	—
10.1+	12.1	—	—
Total Paying Rent	100.0	100.0	100.0
Not Paying rent	41.8	26.8	23.8

SOURCE: Computed from AMC *Report on Census of Slums in Ahmedabad*, 1976. Statement X.

Thus the constraint lies not only in the inability of people to pay for housing despite the apparent worsening of the economic opportunities, but as much in lack of suitable opportunities for housing for these groups of people.

Compared to these probable abilities to pay for housing, the costs of houses in both the public and private sectors bear no relationship to them. Kaushik's case studies of housing in the three different sectors bring this out clearly.²² The cost of houses in the public sector, which

²¹B.B. Patel, *Slums in Ahmedabad*, Sardar Patel Institute of Economic and Social Research, 1978.

²²R. Kaushik, *op. cit.*, 1981.

were specifically meant for EWS sections were almost Rs. 10,000 in 1976. As compared to this, the quasi-legal developers had built their 'chawls' within a range of Rs. 2,000-4,000 only. In the 'popular' sector, where the dwellers had themselves managed the construction of houses, there was a wide variety of costs ranging from Rs. 600 to Rs. 5,000. There are no comprehensive estimates available for the officially recognised private sector. However, this is even more inaccessible as an informal survey put the minimum cost of a house in this sector at not less than Rs. 16,000 in 1981.²³ These numbers are also supported by Singh (1981) who found that the cost of a house in a EWS scheme by Gujarat Housing Board was Rs. 11,000 in 1977. Munshi's (1981) case studies of squatter settlements in different areas in Ahmedabad revealed that the costs ranged from a mere Rs. 150 for a mud and tiles house to Rs. 1,500 for a more stable house. More importantly, the incremental housing process allows the people to invest as and when their situation permits them.

On the whole, however, we do not have detailed information regarding the prevailing cost structures in different sectors and the factors which promote private investment and savings for housing. The above case studies illustrate the gap between what is tolerable and the prevailing opportunities. The other important aspect concerns the ability and willingness to pay by different groups. For the slum households although there is some relationship between the household income and the ability and willingness to pay for housing in terms of a ceiling on the highest that they can afford, the actual expenditure depends on a variety of other factors, like, security of tenure as discussed before. More insight in these processes is, however, necessary to devise ways in which maximal use of people's resources may be attained, in a more efficient and equitable manner.

Thus besides the low levels of capacities, the slum households are also constrained by a general lack of supply of low cost solutions in housing. They are also often further constrained by a lack of adequate information regarding the housing market. The channels of diffusion are through the social network in most cases, which limits the level of information to certain groups only. Even when information may be available, their creditworthiness for publicly subsidised financing is very poor due to both the illegal or quasi-legal nature of tenure and irregular sources of income. Their need for small loans with flexible repayment schedules most often cannot be matched by the rigid financial structure of public agencies.

²³R. Radhakrishna, *et. al.*, *An Exploratory Study on Slums*, Ahmedabad, Sardar Patel Institute for Economic and Social Research, 1978.

SUPPLY PROCESSES -EVOLUTION OF SLUM CLUSTERS

In the previous sections we explored the possible reasons for households to resort to 'slum' housing and the nature of their priorities and constraints. Here, we are specifically looking at how these areas are formed and how they evolve over time. It is common on the part of the urban planners and policy makers to regard the entire slum formation as being of a rather homogenous type. However, the generally similar physical character of these areas compared to the middle-income housing areas hides the realities of their evolution. There are distinct patterns in their evolution and for a given cluster, these also change over time.

Conceptual Basis

The conceptual framework is based mainly on Baross (1979), which focuses on the processes at the 'settlement' (or cluster) level. At this unit, the discussion is more on "the *collective* features of a residential environment rather than with the incidental, individual arrangements that individual households may make in using or producing it". The actions of different sectors in this process and the "social organization within which they pursue their activities"²⁴ then becomes the basis for an understanding of the evolution of these settlements. The four major groups identified by Baross appear relevant in Ahmedabad also. These are the 'state sector', which covers all the public agencies with differing powers. Within this group, it may be useful to distinguish between the Municipal Corporation, which is a local body and other state-level organisations.²⁵ The second major actor group is the 'private enterprise'. They participate in different resource markets like land, finance, building material production and construction technology. These are discussed later on. However, in view of the 'slum' areas, a major distinction is needed between the officially recognised private sector and the unrecognised illegal or quasi-legal part of this private sector. The major distinguishing feature of the private enterprise sector is the motive of economic profitability behind their actions. The third group 'community sector' is characterized by "a common concern to achieve benefits—use values—for their members and operate on the basis of group concerns or priorities". This may comprise of formal registered organisations or simply informal associations of co-residents. The last actor group is "the individual family (or household), the ultimate user".

The major areas of action relevant in low-income settlements formation and evolution include land, shelter (labour and materials) and

²⁴G. Singh, *Housing Mobility Processes*, Dissertation, School of Architecture, Ahmedabad, 1981.

²⁵B.D. Sinha, *Housing Growth in India*, Delhi, Arnold Heinmann, 1976,

the necessary infrastructure and services, the groups of actors identified above, adopt different methods of resource mobilisation or gaining access to resources to carry out their actions for these three main components of settlements.

A given settlement is then the outcome of changing actions in the sphere of three main components of land, shelter and infrastructure services, by different actors utilising different methods for gaining access to relevant resources. Also, over a period of time, as the settlement evolves, new and changing priorities demand new areas of action for each component. Generally, there is an effort to achieve higher forms of tenure, shelter and services for the settlement, unless the priorities for any of these are very low. Thus over a period of time the actors and the methods both may change for the important components of the settlement. This dynamic aspect is extremely important for consideration of appropriate support measures in the evolution of low-income settlements.

Drawing on a number of studies which have directly or indirectly looked at the processes of evolution of clusters or settlements, in the light of above conceptual frame, there are six distinct models which seem to be quite prevalent in Ahmedabad. We do not claim any exhaustiveness for these models or the significance of any of these.²⁶

Squatter Settlements

The first group of models from what may be called *squatter settlements*. The major distinguishing feature of these is that land is generally illegally appropriated. The actual development is carried out by either a community acting in their own self interest or by an opportunist 'slumlord'. In the first case, either marginal land which may be either unusable due to topographical features or in the form of leftover strips which may be unusable for conventional developments is appropriated. Sometimes, land owned by the government or acquired for particular use under the development plan which has not been developed due to certain reasons is also taken over for this purpose. Slumlords on the other hand generally have knowledge regarding lands with absentee and uninterested landlords or under legal disputes of almost unsolvable nature. Often the site development is not preconceived and, therefore, quite haphazard and not amenable to an easy installation of services at a later stage. These type of settlements are more likely to come up near places of work. However at times, in conditions of emergency, due to riots, floods or forceful eviction from another site, any potential site may be taken over even if the location is a little inconvenient. The development then

²⁶J.F.C. Turner, *Housing by People: Towards Anatomy in Building Environments*, London, Marion Boyers, 1976.

proceeds rapidly as relatives and kith and kin flock in, once some security is possible. In any case, larger numbers also tend to ensure security of tenure due to political vulnerability of the situation. Households at all levels of economic ladder may be found here as it offers a solution to all types with no rent or generally very low rents.

For shelter the most eminent form of tenure is that of owner-occupant only. Though there are some tenants, this is not very common. The material quality of shelter depends generally on the income levels of the households. Thus, a great variety of levels is observed. In most cases, however, the scope to expand the area of the house is not possible except for the more dominant households who generally keep larger areas for themselves. The latest trend in the slumlord type of settlements is quite promising, as the residents have tended to organise once the knowledge of the completely illegal position of the slumlord is discovered. The local leaders in many cases have overthrown the stranglehold of the slumlord and stopped paying rents to him. Further, the implicit policy of the Municipal Corporation and their legal position presents no possibility of eviction. In accordance with the corporation's policy to provide the minimum infrastructure of common water taps, waterclosets and individual drainage connections, a large majority of the settlements have obtained these.

Quasi legal Subdivisions and Tenants

The second major group of models consist of quasi-legal subdivisions and tenements. The main distinguishing feature of this group is in terms of the method used for access to land resources. Unlike the direct appropriation used in the first group, the dominant form in this group is through market forces initially and later sometimes through kinship arrangements. We have identified three models within this group.

Community-based Subdivisions

In the first case, a community, either on the basis of social or occupational groupings buys or leases out land from a land-owner, often albeit through some middleman. They then do the necessary subdivisions and allocations as a group, the rent for the land or the price at the time of purchase being also paid as a group. Shelter is often developed by individual households according to the access to building resources and capabilities. The settlement is quasi-legal, only in the sense that no formal permission for site layouts or buildings is sought from the authorities. The tendency therefore is to have a well laid scheme but at the same time trying to maximise the use of land regardless of ventilation conditions in cash house. The subsequent development of infrastructure services depends on the location and the general prosperity of the residents.

Landlord-based Subdivisions

In the second model in this group similar type of development is initiated by the legal landlord himself. In most cases the landlord operates through a middleman who often turns into a slumlord himself. There are two main reasons for a landlord to go in for promoting such development. A lot of areas which have been now engulfed by the urban growth of Ahmedabad were considered distant outlying areas just three to four decades back. In those days for the landowners it was quite profitable to rent out plots of land to low income groups who would then construct their own shelters/huts. Thus, without making any investments, the landlords collected rent for the land which was in a number of cases inherited ancestral property.²⁷ Also, the possibility of eviction was not as explosive an issue as today. Especially, in some clusters, the developments occurred before the enactment of rent control act. Subsequently, however it was not possible to evict the tenants who were generally aware of their rights. These sites have also been developed overtime without much consideration to an efficient design of the layout. In this situation, the subsequent developments have taken turn in two directions. In some cases, there has been a more community-based development with further additions taking place through kinship arrangements. In others, however, the initial occupants have tended to become 'slumlords' and further additions are controlled by them and access is through market mechanism only. In this case, the rents are generally high and strictly enforced. Any improvement of the shelter is not readily permitted nor is the security of tenure for the tenants at all assured. The slumlord will take all the precautions to prevent any organisation of the tenants against him. In such cases, the response of the landlord may be to take legal action (which is rarely successful), seek an intermediate solution of 'buying off' these people or those with political connections may manage to have this land 'acquired' for public purpose.²⁸

A second reason for the landlord to promote this type of development arises when his land is put under acquisition or reservation for some public purpose.²⁹ As the value of land to the owner is frozen, it may be more profitable for him to promote development of subdivisions

²⁷Generally a density of about 80 households per acre was common on such developments. At Rs. 10 per household per month, an income of Rs. 800 per acre was possible for the landlord without making any investments. This land would not have yielded any returns otherwise for a long time.

²⁸In the first case, the high rates of return on both residential and commercial developments would ensure substantial profits even after paying off the slumlord. In the second case, the landlords manage to get another plot of land in exchange which is free from any hassles.

²⁹This is most likely also happening in many pockets of land which come under the land Ceiling Act, although we do not have any concrete evidence on this so far.

and distribute these through an intermediary on collection of deposits and monthly, payment of rents.³⁰ In such cases, though extremely dense the clusters tend to be well laid out. The plot sub-divisions are generally done by the intermediary slumlord and development of the shelter is left to the residents. This is then based on the capacities of the households concerned. In these type of settlements also, there has been a tendency for the residents to organise and overthrow the slumlord. In many cases, direct contact with the concerned authority is established and resource to political pressures is also made to get the settlement officially recognised.

Owner-developer Rental Units

The third model of quasi-legal developments occur on land which is legally owned by the owner-developer. However, the illegality aspect comes in two forms. The land may have been zoned for other uses (e.g. green belts, garden, etc.) or it may be part of the common plots provided in a public housing scheme.³¹ The development is also illegal in terms of not meeting the bye-laws and other building regulations, as no building permissions are even sought. The layout and shelter designs are similar to the model above. Although well-laid out, they are very compact, ill ventilated and with very high densities. Some communal facilities are sometimes provided. The rents are very high with a space of less than 100 sq. ft. fetching Rs. 60 to 80 per month. The enforcement is extremely strict with defaulters being evicted.³² The security of tenure is thus totally linked to the ability to pay. There is also no incentive for any improvements by the tenants. The provision of services in this area by the Corporation ultimately benefits the owner much more. This model, however, demonstrates the prevalence of high effective demand amongst these groups also.

Public Housing

The last group of development is that developed by the public housing agencies. The main methods of resource mobilisations are the adjusted markets for finances, land and materials and the completed

³⁰In such a case, for a cluster just outside the boundary of corporation, the slumlord collected Rs. 21,000 as initial deposits in 1969 and about Rs. 2.3 lakhs in rents for seven years from 1970 to 1977 for a plot of 2 acres, which housed a little over 2000 households.

³¹The latter may be a special case in that such developments have occurred in spaces meant for keeping the animals of Rabaris in a public housing scheme.

³²The cost of such a house, inclusive of land cost, was estimated at approximately Rs. 3500 (Kaushik, 1981). The rate of return thus works out to be 25 per cent per annum, though at HUDCO's terms for EWS the economic rent would have been only Rs. 20 per month. Looked at it in another way, these households can afford a house costing Rs. 12,800, at HUDCO's terms for EWS.,

houses are allocated on the basis of administrative allocations. The material quality of shelter is generally much better; however, in terms of size, they generally compromise. The level of services is also much better. The actual cost of the housing is much beyond any in the above models. At present, the minimum costs would stand at Rs. 10,000 despite the controlling of land component. This can be made accessible to low-income groups only through subsidisation which affects the numbers which may be reached. It is very common and generally accepted by the 'officials' to find leakages to non-target group households. The Ahmedabad Municipal Corporation has recognised the non-viability of such projects and has rightly switched its attention to slum improvement. This unfortunately is not true for the other public agencies in the city.

POLICY IMPLICATIONS AND RESEARCH ISSUES

Policies with respect to housing the urban poor have evolved over time from strategies of clearance and eviction, to benign neglect to improvement of existing slum areas. However, there has been a general lack of a well-planned strategy aimed at meeting the needs of this strata of population both in terms of magnitude and the nature of housing services required. The corporations and other local bodies have at the most resorted to an improvement of areas created by the processes described in the above section. Apparently, Turner's plan for treating these as 'solutions' as gaining ground with decision makers all over. The government's role is thus envisaged as improving the conditions in these 'solutions'. However, it appears from the evidence presented for Ahmedabad at least, that there may be 'costs' or disbenefits attached to these solutions both for the inhabitants and the public agencies and society in general. Although further research is necessary to identify these more clearly, a few may be discussed at this stage. There are three issues which may be important for defining appropriate strategies in this area.

Efficiency of Urban Land Patterns

There is almost no attempt to analyse the costs of the rather haphazard developments which inevitably result from the processes traced in the above section. The costs may be mainly in terms of additional infrastructure costs and mass transportation costs for the city as a whole. This often happens because of totally uncontrolled and extensive leapfrog development at the periphery of metropolitan development. This is most likely happening in Ahmedabad and it remains an important research issue also. The infrastructure lines which have to come up later on, sometimes through patches of open land may force the costs up tremendously.

Similarly, at the level of individual clusters, where the government has provided the basic drainage facilities, the inefficient physical layouts, and often the topographically unsuitable sites, force the costs up relative to rather planned layouts. The efficiency of services provided at higher costs on the other hand tend to be much lower. Especially in the 'slumlord' developed clusters, there is no attempt to maintain any community open spaces either. Further, the scale economies arising from large planned developments also cannot accrue to these developments.

Thus, these 'solutions' which the government tends to support may prove to be very inefficient if investigated in detail. The major benefit which however accrues from these areas is the flexibility in terms of shelter development and social groupings to suit the nature of needs and priorities. However, a well planned site and services programme which would ensure the access of low income households to land in an efficient manner, may also enable the similar benefits to be accrued.

Security of Tenure and 'Popular' Control

The second major issue relates to the patterns of the 'popular' Control that people really have over their housing environments. The positive effect of community control in terms of shelter quality and efforts to gain access to infrastructure have already been noted. Similarly, the positive effect of tenure security in bringing forth the latent resources is also evident. However, this is not true in cases of 'slumland' type developments. It is also our contention that this system with even stricter controls than before is most probably growing rapidly in the newly developing areas of Ahmedabad. This of course needs substantial further research in terms of both the processes and associated costs. In these developments, there is a complete lack of any community effort, it is even negated directly. The insecure tenure and high rents further adds to their plight. The government cannot very easily ensure tenure security in these cases without any major structural reforms. Any improvements in these areas also fail to benefit the tenants as much as the 'slumlands'. It is thus obvious that there is an urgent need to meet this effective demand through public efforts which would ensure efficiency, flexibility, and community control at the same time. A planned programme with minimum resources can ensure more than matching investments by the households themselves. This will ease both the densities and rent levels considerably in the existing slum areas also.

Transfer of Resources

The third major issue refers to the transfer of resources which takes place in these type of slum-lord-tenant developments. The transfer of resources from the low-income tenants to slumlords may occur in two ways. Firstly, we have very crudely estimated that within the corpora-

tion limits annually about Rs. 10 lakhs are transferred as rental income to different slumlords in the city.³³ This represents in most cases, total profit also as the slumlords generally have made very little investments for their clusters. Secondly, these slumlords often wield considerable powers and can evict people from the houses, although the family may have itself invested in the house. This is then lost to the family and transferred to the slumlord.

As against such gains by these slumlords they do not contribute to the costs of infrastructure to be provided in these clusters at all. Any transfer of resources envisaged by the government through the slum improvement programme will thus fail unless a planned programme for the entire need, existing and future, is undertaken.

CONCLUSIONS

We have attempted to outline the housing processes in Ahmedabad with reference to the poor from three related aspects. The growth of 'slum' housing in Ahmedabad appears to be related to both the worsening of economic opportunities for lower income groups as well as a lack of alternative housing opportunities. Further, we examined the nature of housing need in terms of the priorities, abilities and constraints of people at lower income levels. Even here, it is apparent that 'slums' appear to be the only alternative. However, these slums are not homogeneous in terms of the supply processes which affect their formation and evolution. Though apparently 'inevitable', these do not necessarily represent efficient and equitable solutions. This is brought out in the third section on the planning issues. More research specifically oriented to understanding the need and supply processes in view of these issues in many urban areas is essential. The results of these may indicate the nature and content of strategies oriented to the needs of the urban poor in an efficient and equitable manner. □

³³In 1976, according to AMC (1976), the average rent being paid was Rs. 12.5 per month and about 65 per cent of the households were paying rent. Applying these same parameters to an estimated 1.3 lakh households in slums in 1981 the total rents came to almost 1.27 crores per annum. Even this may be an under estimate as it is quite likely that both the rents and proportion of households paying rents have increased in the last five years.

Economics of Housing

A Select Bibliography

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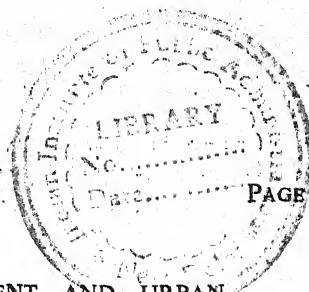
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Contents



Articles

- ✓ SOCIAL INFRASTRUCTURE DEVELOPMENT AND URBAN POPULATION THRESHOLDS 1
V.L.S. Prakasa Rao and Nira Ramchandran
- ✓ URBANISATION IN MADHYA PRADESH 20
A.C. Minocha
- ✓ INCORPORATION OF NEW TRACTS WITH MUNICIPAL GOVERNMENTS 40
Satyesh C. Chakraborty
- ✓ SOME PERSPECTIVES ON PLANNING FOR URBAN DEVELOPMENT: A CASE STUDY OF A MONO-FUNCTIONAL TOWN 48
R.N. Hadimani
- ✓ ROLE OF MUNICIPAL COUNCILLORS IN URBAN DEVELOPMENT 56
Mohit Bhattacharya
- ✓ HAVE RICKSHAWS OUTLIVED THEIR NECESSITY IN CALCUTTA? 66
D.K. Halder and Satyabrata Basu
- ✓ AIR AND WATER POLLUTION CONTROL IN THE CALCUTTA METROPOLITAN DISTRICT: ISSUES OF TASKS AND ORGANISATION 76
P.K. Saha
- ✓ THE INDIGENISATION OF MANAGEMENT EDUCATION AT THE LOCAL LEVEL IN NIGERIA 82
Dele Olowu

✓ WATER PRICING: WITH REFERENCE TO THE CALCUTTA
METROPOLITAN DISTRICT: A REJOINDER

96

T.K. Banerjee

Book Reviews

POLITICS OF WATER SUPPLY: THE CASE OF VICTORIAN
LONDON (ASOK KUMAR MUKHOPADHYAY)

100

Satyesh C. Chakraborty

✓ URBAN PROBLEMS AND POLICY PERSECTIVES
(ED. GOPAL BHARGAVA)

104

C.S. Chandrasekhara

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Article

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Social Infrastructure Development and Urban Population Thresholds

V.L.S. PRAKASA RAO
and
NIRA RAMCHANDRAN

THE TERMS infrastructure, amenities, services and facilities are often interchangeably used to denote the provisions made to satisfy some of the basic needs of the people. These needs cater to a variety of requirements from the basic life-sustaining needs, like safe drinking water, health and nutrition services, sanitation, housing and sewage disposal to 'felt needs', like educational facilities, including libraries, shops, hotels, restaurants and recreational facilities, public transport facility, electricity as a consumer good and police protection. The term 'social infrastructure' which is more comprehensive in nature and includes a variety of amenities/services/facilities is gaining greater currency. Since the provision of many of these facilities has become the responsibility of governments and also since these facilities are interrelated with each other for purposes of planning, package programmes are needed.

A distinction may be made between 'felt needs', perceived by the people and 'professed' or professionally defined needs suggested by urban-based specialists (Cheyne and Lloyd, 1975). The range of these needs includes the traditional weekly markets in the tribal and hill forest areas at the one end of the scale of infrastructural hierarchy (see Appendix I) and the modern shopping complexes with cinemas, discotheques and beauty saloons in the metropolises at the other end. Banks, cooperative societies and market infrastructure claim their due place in the list. Such a range of facilities combines both social and economic components. However, the two components can not be compartmentalised.

THRESHOLDS AND RELATED CONCEPTS

The decision to provide social facilities in specific locations calls for an analysis of the characteristics of an individual facility and its priority over a range of 'felt and professed needs' of the people. The

provision of these facilities in a free market situation requires a minimum aggregate demand, *i.e.*, threshold to support the facilities in a given location. It follows, therefore, that the various facilities will have differing minimum aggregate demand requirements, and the required minimum aggregate demands will progressively reduce with increasing levels of development and increasing levels of income of the population.

The term 'threshold' itself has three different connotations in urban literature (Moseley, 1974). In terms of economic development, 'threshold' marks the 'take-off' point at which the economy attains self-sustaining growth; to the planner, threshold marks a break in a process of urban development which necessitates major capital investment before further development can take place; with reference to urban or for that matter rural infrastructure, threshold connotes the minimum support population necessary for sustaining an amenity or a function.

The minimum number of people required to support a facility would include not only the size of the population of the place where the facility is (to be) located but also the number of people living in the surrounding areas who are willing to travel a given distance (*i.e.*, the range) to avail themselves of the facility. Consequently the 'range' of the facility can not be isolated from the 'threshold'. The logical ties between these two concepts (range and threshold) are well brought out within the framework of Central Place theory, which provides the conceptual base for many of the locational problems associated with infrastructure.

Reciprocal relationships between the centre and its catchment area and among centres constitute the logic of Central Place theory. The range of the good and population threshold are the basic concepts. While the validity of the theorems of Central Place theory is questioned, the logic of the theory holds good (Ruston, 1971). Likewise in a hierarchic structure, while the 'nesting' in an ideal form and the number of levels are questioned, the existence of hierarchy is recognised whatever be its form. If social infrastructure is ubiquitously distributed over the settlements, population threshold loses its meaning. But in social infrastructure which is not ubiquitous, there is the "centralistic principle" both within a settlement and among settlements. This principle is to be sought in the location of services to which the users move. In regions with higher levels of development and better transport network, it is the more accessible functional centre even with eccentric geographic location which becomes important. An ideal location is one where the geographic centre and the functional centre coincide in location. But location becomes more complex where 'relative' location has more than one attribute, *e.g.*, contact zone and frontier locations. A settlement could be central to its catchment area, and yet function as a satellite to a metropolis. Here the conventional hierarchic order breaks down. With

changing levels of development and owing to policy interventions, the hierarchy gets disturbed. The travel-behaviour patterns of both consumers and producers also change, often leading to the bypassing of intervening opportunities. It is in the context of these changes that the need for a revised Central Place theory based on a more realistic behaviour and environmental assumptions and re-evaluation of earlier tests of the theory is being stressed. In an exercise in realignment of the theoretical base for efficient and equitable development of social infrastructure, the research theme is to link Central Place theory and Location Allocation Models.¹

Associated with the problems of location of infrastructure is the distance factor. Distance norms are not only area-specific, but also time-specific and are reviewed periodically, may be, synchronising with development plans. With declining small towns and declining or disappearing small villages (below 200 persons), with the intervening settlements located within a critical distance range of 15 to 20 miles getting bypassed by the high income and middle income consumers, with closing down of market centres in some areas (*e.g.*, Raichur district) and with new centres springing up (project towns and industrial centres) in other areas, regional systems are in a state of constant change. In spite of these changes, the "distance factor" is still significant particularly in the regions where small and medium farmers dominate, and the level of development is low. There is a progressive increase in distance from the low order functions to the high order functions (Table 1). The very pattern of consumer travel behaviour is changing in favour of larger settlements where superior and varied services are available owing to larger thresholds. The bypassing of intervening settlements located in the shadow zones of larger settlements and within critical distance zones is leading to redistribution of consumer demand for services. Mobile service systems and specialists (*e.g.*, medical) from higher order centres opening regularly one or two day clinical units in the smaller and market towns are the emerging patterns of urban services. (Parvati, 1977). The analysis of consumer travel behaviour in a Block in a developed agricultural district in the upper Gangetic Plain (Muzaffarnagar district) threw up several important insights: (1) that villagers discriminate between central places in the purchase of various consumer items, (2) that central places differ in mix of purposes for which they are visited; (3) that the richer sections of rural society tend to bypass the lower order central places and invariably go to higher order central places for various goods and services, and (4) that the choice of central places for

¹Pilot Research Project (1969-1974) of the Government of India. International Project on Locational Efficiency of Rural Service Delivery Systems (Rushton, McNulty, Tewari, Universities of Iowa and Mysore and the Indian Institute of Management, Bangalore, 1980-82).

TABLE 1 MAXIMUM TRAVEL DISTANCE STANDARDS FOR SELECTED SERVICE FUNCTIONS, PHIRANGIPURAM BLOCK, (COTTON-VIRGINIA TOBACCO TRACT) ANDHRA PRADESH

<i>Institution</i>	<i>Maximum Travel Distance Standard</i>	
	<i>Km.</i>	<i>Miles</i>
Primary School	3	2
Credit Cooperative		
Branch Post Office		
Health Sub-Centre		
Secondary School	8	5
Post Office		
Retail Store		
Market Sub-yard		
Higher Secondary School	10	6
Primary Health Centre		
Large Market Sub-yard		
Technical School		
Junior College	15	9
Market Yard and Storage		
Hospital		
College		
Regulated Market	20	13
Fertilizer Wholesale Facility		

SOURCE: Roy and Patil 1977.

the purchase of goods is significantly influenced by multiple purpose visits and differences in price levels (Prakasa Rao and Ramachandran 1971).

PROBLEMS OF MEASUREMENT

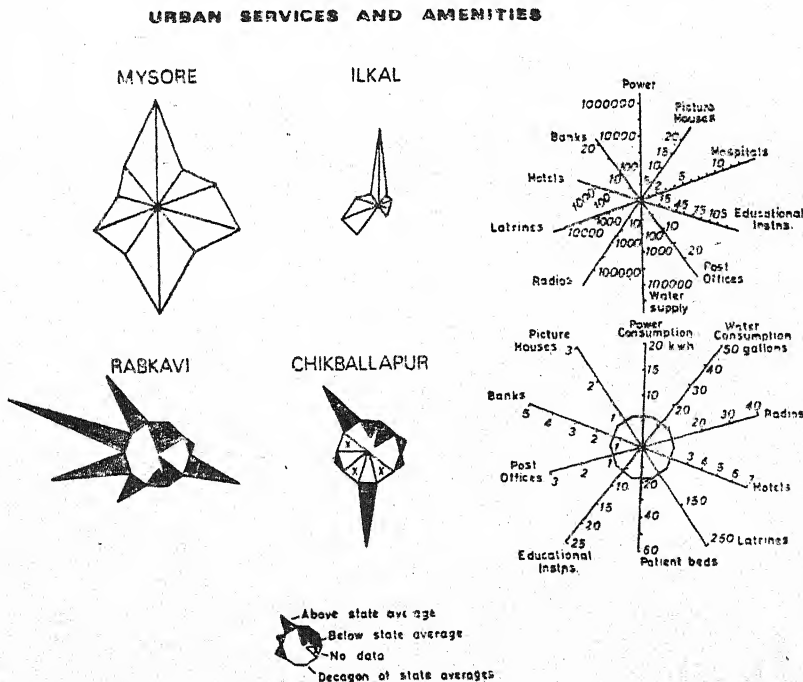
Both the measurement of individual facilities and social infrastructure in general, on the one hand, and the measurement of thresholds for these on the other, pose a variety of problems.

How can a common denominator for measuring and evaluating different components of social infrastructure, which vary in number, unit of measurement, type, level and capacity be worked out? Some components are location-specific like education and health facilities; while others are not, for example, water and electricity, where the network system becomes more important in measurement. In the case of basic needs, the objective is to make them available to every individual and in every locality. Here measurement relates to the necessary minimal level. In India, the level is 'zero' or 'near zero' starting point

for the majority. When once this level is crossed, comparative measurement poses problems. Different levels can be equated from the lowest to the highest:

Primary School	—	University
Health Centre	—	Specialised Hospital
Provision Store	—	Shopping Complex
Route Terminal	—	Multiple Route Node.

Methods of measurement are varied, and range from simple to complex. Mere availability (Yes) or non-availability (No) is too simple a measure for too complex a set of functions. A somewhat star-shaped symbol taking the form of a "windrose diagram" for each settlement can be used to assess the degree of attainment of selected services. These are measured along the radii of the symbol, centred over each settlement. The size and form of the symbol can be taken as a basis for comparative evaluation (Fig. 1).



The Figure indicates the absolute deviations from the state average represented by the decagon. The main advantage is that different ser-

vices and amenities can be represented in one diagram. A comparative evaluation of the situation in urban services and amenities among towns and among one region and the other is possible since the scale for each element remains the same for all the diagrams. Contiguous areas in similar situations, as suggested by the similarity of shapes of symbols and their distribution, are clearly brought out.

The limitations of this type of measurement are: the scale along the radii is arbitrary, hence, a change in the scale changes both size and shape of the symbol; the units of measurement along the radii are different, *e.g.*, in gallons for water, absolute number for hospitals, schools, hotels, etc., and units for electricity. These different units need standardization, and should also be weighted. (Prakasa Rao, 1964).

Adequacy or inadequacy in services can be measured also with reference to specific norms:

Water:	20 to 40 gallons per capita per day
1 Dispensary:	5,000 Population
1 Health Centre:	20,000 „
1 Hospital	
(2 beds per	50,000 „
100 people)	
1 H.S. School	15,000 „
1 College	50,000 „
8 to 10 Shops	1,000 „
1 City Centre	1,50,000 „
1 Cinema	20,000 „
1 Stadium	1,00,000 „
1 Post and Telegraph	10,000 „
Office	
1 Telephone Exchange	1,00,000 „

SOURCE: Rame Gowda, 1972.

To work out locational priorities in the development of social facilities, 'norms' are necessary. National norms such as one primary health centre for every 80,000—1,00,000 population, one sub-health centre for every 10,000 population, a primary school within 1.5 kms or less of a village, a middle school within 5 kms of a village (Sen *et al.*, 1971) very rarely fit local and regional realities. We do not yet have an inventory of norms for different regional and local situations in the country. The average number of schools or hospitals per 1000 people is often taken as a norm and those below the average are given priority. When once this target is reached, the norm will change. Thus the whole question of norms has to be examined and revised periodically.

Techniques of determining population thresholds based on the entry point (Christaller, 1966) and the median population of settlements having the function suffer from the disadvantage of under-estimation in the one case and over-estimation of the threshold in the other. (Sharma *et al.*, 1977). A combination of the two (Reed and Muench, 1938, Haggett and Gunawardene, 1964, Ramachandran, 1976) yields more accurate estimates. But inherent in this method too, is the tendency to over-estimate threshold values in the case of higher order functions. This, however, can be counteracted by disregarding the threshold values of functions which are not present in at least half the settlements above the threshold size (Sharma *et al.*, 1977). Based on the premise that the population size of a centre is a function of the complexity of goods and services offered, an exponential function of the form $P=A(C)^n$ has been used to derive population thresholds (Berry and Garrison 1958, Sen, *et al.*, 1971).

All the above techniques, however, rest essentially on one assumption—the premise that the population of towns or villages is essentially homogeneous in nature and portrays similar consumer behaviour characteristics.

POPULATION THRESHOLDS: INTER-STATE VARIATION

The assumption that the threshold is dependent upon the order of the function presupposes a similar threshold size for a particular function irrespective of its location in space. But the realities of regional distinctiveness, cultural traits, the heterogeneity and the level of development of the area all make this assumption untenable. Such distortions are brought out in the empirical analysis that follows.

Based on public sector and/or private sector involvement, urban services are also classified into three groups: (a) the basic services with almost no private sector involvement—water supply, drainage, roads and street lighting; (b) the supplementary services with both public and private sectors—education and medical, and (c) the special urban services—transport, housing and communication. While both sectors are involved in transport and housing only the public sector is involved in communication (MMDA, 1978).

With increasing involvement of governmental agencies in the provision and planning of 'social infrastructure' the problem includes 'non-economic' dimensions. Much of the provision of amenities which fall within the range of 'social infrastructure' are subsumed in a number of 'welfare programmes' aimed at 'specific target groups' and 'target areas' (backward areas). Consequently social infrastructure development implies not only making available the basic infrastructure but also providing for its more equitable distribution among the different socio-

economic groups and over geographic space.

The stance of the government towards social infrastructure development is essentially non-commercial. The very term social implies a non-commercial stance (Williams and Anderson, 1975).

Once a non-commercial stance is taken for the provision of social infrastructure, the minimum aggregate demand needed to support the infrastructure in a given location loses its importance to a great extent. In other words, the thresholds are lowered artificially by investment by the government in the infrastructure. The lowering of the thresholds, then, becomes a function of the priorities of the government based on equity and 'felt needs'. This is manifested in the proclaimed targets of the government to make infrastructure available to a greater number of people at smaller distances. Consequently norms are fixed by the government from time to time that outline the government's intention for providing a facility for a given unit of population irrespective of its population threshold.

In the light of the preceding discussion the following questions can be raised. At what point does a town become capable of supporting a particular facility? Does the population threshold change with the general level of development? In other words, do we expect higher thresholds in backward areas indicating demand levels? Can we conclude that with increasing levels of development and facilities becoming ubiquitous, thresholds become progressively lower? To what extent does the stance of the local government relating to the provision of social infrastructure get reflected in the population thresholds?

A few selected infrastructural facilities are chosen for three states of India—Punjab, Karnataka and Orissa. The three states are at various levels of development as brought out by a composite index of development (Punjab: 1.2442; Karnataka 0.5739; Orissa: (—) 0.8005)².

The five facilities that are considered include those which are essentially public as well as private enterprises: (1) Medical Engineering colleges; (2) Polytechnics; (3) Arts/Science colleges, (4) Hospitals, and (5) Banks. The population thresholds for these functions are computed following Reed and Muench (for ready reference the method is illustrated in Appendix II). The threshold values are tabulated in Table 2. A

²These indices are derived on the basis of a principal component analysis using the following variables for the major states of India: Percentage of urban to total population, percentage of city population to total urban population, growth of urban population, percentage of literates to total population, average daily employment of factory workers per '000 population, per capita gross output in industry, per capita value added, per capita industrial consumption of electricity, per capita bank credit of commercial banks, area under selected commercial crops as a percentage of gross cropped area, hospital beds per lakh population, motor vehicles per lakh population.

study of the table brings out the following points:

1. There is progressive increase in population threshold from Banks to Medical/Engineering colleges in all the three states.
2. While the order of these facilities remains the same as indicated by the population thresholds, the threshold size itself varies in different states for a given facility.
3. Colleges have roughly the same population thresholds in all the three states.
4. There is no relationship between population threshold and level of development of the state.³

TABLE 2 POPULATION THRESHOLDS OF URBAN FACILITIES

<i>Facilities</i>	<i>Karnataka</i>	<i>Punjab</i>	<i>Orissa</i>
1. Medical/Engineering College	86,000	1,08,000	75,000
2. Polytechnics	66,000	86,000	48,000
3. Arts/Science Colleges	24,000	25,120	25,500
4. Hospitals	8,600	12,590	5,000
5. Banks	2,625	5,012	8,000

POPULATION SIZE AND INFRASTRUCTURE: INTRA-STATE VARIATIONS

A closer look at the thresholds of these facilities in Karnataka reveal that there are small settlements that have a facility while there are larger ones without the facility. These situations are not rare but quite common as brought out by Table 3. Such anomalies occur owing to the non-commercial stance of the government, specific area development programmes, the influence or shadow effect of the large urban centres that encourage by passing of smaller centres, the population density of the surrounding areas. To demonstrate the existence of these anomalies we have a closer look of the population size of the urban centres and the level of infrastructural development in Karnataka. The infrastructural scores of the urban centres are derived through principal component analysis using seventeen facilities.⁴

³The lower threshold values (with the exception of colleges) for different facilities in the relatively less developed state of Orissa can perhaps be explained by the deliberate social interventions of the state. This, however, needs to be tested.

⁴Total municipal expenditure, higher secondary schools, beds in medical institution, electric connections domestic, electric connections: commercial, electric connections: industrial, road light points, banks, cinemas, auditoria, drama halls, libraries/reading rooms, arts/science/commerce colleges, medical/engineering colleges, polytechnics, non-agricultural credit societies, protected water supply, number of buses connecting, agricultural credit societies, and number of routes converging (Prakasa Rao *et al.*, 1978).

TABLE 3 ANOMALIES IN SIZE AND FACILITIES IN KARNATAKA

Facility	Threshold	Number of Towns	
		Above threshold without facilities	Below threshold with facilities
1. Medical/Eng. Colleges	86,000	5	5
2. Poly technics.	66,000	4	8
3. Arts/Science colleges	24,000	9	34
4. Hospitals	8,600	43	15
5. Banks	2,625	14	3

It is possible to compute the expected level of infrastructural development, given the population-size based on regression analysis. High positive deviations of observed scores from the expected value will represent towns that have a higher level of infrastructural development than their sizes warrant at a given time, whereas high negative deviations indicate lower infrastructural development than warranted by population size. The size of the urban centres in Karnataka explains about 80 per cent of the variation in levels of infrastructural development.

High positive and negative residuals⁵ have been mapped in Fig. 2. A study of map suggests three important points. There is a shadow effect of large urban centres since many of the urban places near class I cities indicate high negative residuals. Whereas there are about 35 towns with high negative value within 50 kms of class I cities, there are only 3 towns with high positive residual values. In fact 65 per cent of the centres with high negative values fall within 50 kms of class I towns, whereas only 14 per cent of the towns with high positive residuals fall within this distance. Secondly, the relatively poor level of economy of the drought prone, least accessible, least urbanised areas in the northern parts, have lower levels of infrastructural development compared to the population-size of the urban centres. Thirdly the major part of the resource-rich plantation areas show higher levels of infrastructural development than might be expected on the basis of population size.

The results of the foregoing analysis are indicative of a number of problems associated with infrastructural development in generally. First, they bring out that economic development and infrastructural development are not conterminous—a result of non-economic dimensions and governmental interventions. Secondly, situations of under-utilised as well as cover-strained infrastructure exist.

⁵The residuals are relative, given by $\frac{Y - \bar{Y}}{\bar{Y}}$ where \bar{Y} is the expected infrastructural score given the population size (X), and Y is the observed score.

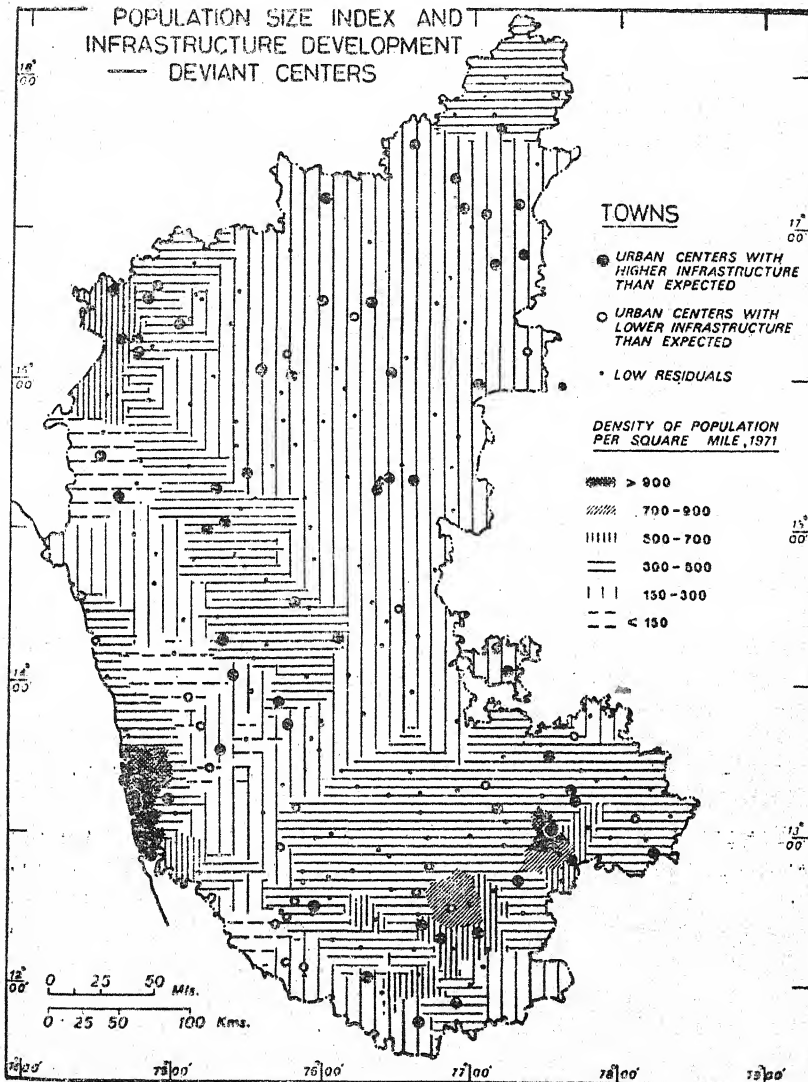


FIG. 2

ACCESSIBILITY TO SOCIAL INFRASTRUCTURE

There is a conflict between efficiency and equity in social infrastructure development. Efficiency is ensured through population thresholds while equity is ensured through accessibility to services as shown in Fig.3. Accessibility to users measured in route, cost and time distances is crucial in social and infrastructure planning, but distance sensitivity is lost in case of specialized services and Government controlled goods. In India, national

distance norms and average distances have no meaning only because of the sharply contrasting natural landscapes, *e.g.*, the desert, the hill forest, and the riverine plains with a dense stream network. In fact, there is a range of distances with critical cut-off values. The very pattern of settlements, *e.g.*, dispersed, as in the Kerala coastal plains, variations in the spacing of settlements is different land system, and the emerging urban corridors further underscore even regional distance norms. Accepting that the distance norms should be local, the question is how to delimit the locality or tract to work out norms. Districts or blocks are taken for fixing norms. But even at this level, there cannot be a blanket decision. Each district or block needs to be tested rigorously with reference to geographical size and form, the pattern of distribution of settlements, transport network, and the often neglected edge problems (*e.g.*, administrative and natural boundaries). The position of the administrative unit in the regional and functional hierarchy determines its degree of closure. It is the character of the edge which is critical, *e.g.*, an unbridged stream or the crest of a hill range. These become more critical in areas of low population density where the traffic does not bear heavy investment in removing transport breaks. Where needed, two or even three blocks should be combined to work out distance norms. Here the search should be for multiple boundary accordance at local level—(Prakasa Rao and Tewari, 1980). Delimitation problems get compounded in the 'contact' and transitional regions.

SOCIAL INFRASTRUCTURE DEVELOPMENT PLANNING (SIDP)

The goal of SIDP is to: (1) reduce inter-town, town and village and inter-village disparities in the levels of social infrastructure, (2) up-grade infrastructure from zero or near zero level to Minimum Needs Levels for target groups and target areas; and (3) reduce the the total distance (*i.e.*, the sum of all distances between each person and each facility) between the users and the services. It needs to be recognised here that neither all places, nor all users can be made to reach all services. Thus priorities need to be worked out which change with levels of development and the associated income levels and aspirations of the users. The users should decide their priorities though often the reformers and the planners decide that the users should have. Proposals for public fountains, parks and mobile services for city slums, and multi-storied structures for slum dwellers without reference to occupational structure are typical examples of the "professed needs" in contrast with the "felt needs" of the user. A senior urban and regional planner designing a 'house' (?) for a fisherman's family in an industrialised port city, was asked whether he had spent a day in the fisherman's 'hut'. Immediately the planner flashed back "why should I"? "Before you can properly remodel a house you

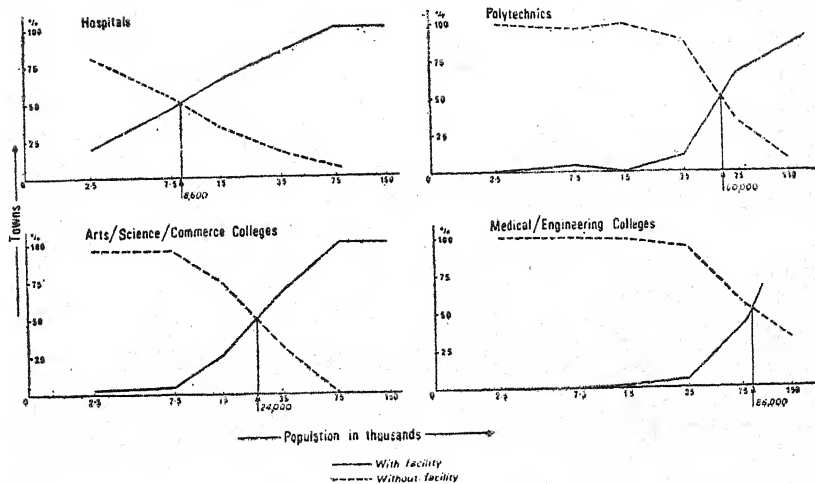


FIG. 3

must first live in it." This sharp bit of wisdom was handed over to Benton Mackaye by a young house wife. This also reiterates the wisdom of Raymond Unwin: "the only way to design a house is first to visualise the actual life or activity in it" (Benton Mackaye, 1962). These simple truths seem to be nowhere in the minds of our urban planners whatever be the reasons. The result of the "professed need" prescription often leads to infrastructure unaligned to the actual needs and priorities of the people, particularly target groups whether they live in towns or villages. Likewise "urban bias" is transplanted in rural areas in proposals for public water systems through overhead reservoirs, and standard teacher-student ratio for village schools.

Centralised planning at the national and state levels associated with implementation by local authorities with no decision-making power as in India, leads more to failures, which are manifested in the form of anomalies like under-utilised or unutilised versus over-strained infrastructure. This is a characteristic of all the developing countries, a result of decentralised implementation under centralised direction and decision-making (Cheyne and Lloyd, 1975). Mere decisions at the national or state level to reduce imbalances in social infrastructure, and shift in emphasis to the "grass roots" level without decentralised decision making and financial devolution are no solutions. The questions who will plan and who will implement crop up again and again. What compounds the problem at both urban and rural levels is the multiplicity of agencies involved in developmental work, each with its rural and regulations which often become 'clogs' in the wheels of administration and planning. The very dichotomy between urban municipal administration and rural panchayat administration in its turn leads to multiplicity of

authorities resulting in functional and jurisdictional overlaps. In metropolitan regions, there is fragmentation of authorities. In multi-level government administration, "the system functions effectively only when upper levels of Government are willing to share power with lower levels" (Abhijit Datta, 1976). All these lead to conflicts between 'developers', and act as constraints in integrated planning of social infrastructure.

At the planning level, the very development strategies of social infrastructure need to be examined critically. It is recognised that different components of infrastructure should be planned as a package health, sanitation, safe drinking water, housing, education, and family planning. For the poorest of the poor, the utility of the 'package' infrastructure gets highly discounted. Often the benefits of the 'package' reach the "better off" of society. At the policy level, policy formulations like the national health policy linking up health development targets with rapid economic growth, full-scale employment, liquidation of literacy, raising adverse sex-ratio and the like only indicate the mixing up of long-term and short-term aspects of health planning. In physical planning of public utility services at the metropolitan scale, for example, step by step incremental planning with "known effect for known effort" instead of long-term and capital-intensive investment in large scale and ideal solutions, is advocated as the most appropriate strategy for countries like India (Koenigsberger: quoted by Cheyne and Lloyd, 1975).

As in all sectors of development, inadequate finances become a key constraint in SIDP. Here the axiom "He who pays the piper calls the tune" should not apply but in practice it appears it applies. While the necessity to top local finances by the local authorities is recognised, both the *modus operandi* and response do not seem to be facilitating the effort. Thus, in spite of the best will, finance becomes the bottleneck. The shift from "cost-norms" to "social-norms" in planning social infrastructure adds to a further strain on the budget. In this context, it is necessary to reiterate that priorities perceived by the users need to be given weightage over the priorities fixed by the planners. The question is, where does the plan for "one bulb for one house" for the weaker sections stand on the priority list of social infrastructure: *vis-a-vis* safe drinking water, health and sanitation and house, to mention a few? The magnitude of the financial outlay even for minimal services will be astronomical, and no other organisation but the public sector will be in a position to provide the necessary social infrastructure. When financial outlays (Rs. 42,000 million: Fifth Plan) are related to the population size of the country (548 million in 1971, with an expected annual increase of 12 million in 1971-81), it becomes evident that any amount of outlay on even minimal infrastructure will be a drop in the ocean. Added to this,

the rate of growth in demand for services always outpaces the rate of growth in investments—(MMDA Report, 1978). Increasing population, an increasing gap between demand for services and rate of growth of investments, and deterioration of services because often maintenance costs are not provided for, all conspire to add to the crisis situation in infrastructure. Thus the very population size becomes a constraint, and its rapid increase further deepens the crisis.

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Appendix 1
ORDER OF SETTLEMENTS AND VARIETY AND LEVELS OF FUNCTIONS

	<i>Administration</i>	<i>Education</i>	<i>Health</i>	<i>Public Utility</i>
Lower Types	Police chowki, panchayat	Balwadis/primary schools	Primary health centre	Post-office
Middle Types	District Court, P.S. with jail specialised officers	Different types of nursery schools, Secondary schools Tech. school	Doctor/dentist, Health centre, Clinic, Drug store	Electricity, municipal water supply, postal telegraph, telephone services
Higher Types	Mayor's Office, high courts, jails, special government Service H.Q.	Secondary school/colleges, tech. schools, universities	General hospitals, Specialised physicians, Large drug stores	Electricity, municipal facilities, communication
Highest Types	Seat of state/national Government, Supreme Court, H.Q. of Govt. departments, embassies	Universities, tech. institute, national research institutes, scientific academies	Specialised hospitals, Medical research centres	Full range of municipal facilities, Telex

<i>Commerce (Shops)</i>	<i>Finance</i>	<i>Transport</i>	<i>Recreation</i>
Weekly markets, small grocery shop	Village money lender, bank extension scheme	Unsurfaced roads	Tea-shop, travelling theatre, folk dances
Retail shops, specialist retail shops, Wholesale markets (mandis), gas station	P.O. Banks, pawn-shops finance companies office	Surfaced roads, R.S. for local slow trains	Cinema, restaurants, hotels
Large retail shop, retail of large consumer durables, Large wholesale and distribution warehousing	Banking, insurance, brokerage	Highways, Imp. Rail road stations, Airport	Auditoria, cinemas, hotels, night clubs museums
Luxury retail shops, Departmental stores, Import/export houses	Domestic and foreign banks, Financial H.Q., Chambers of Commerce, Trade associations	Direct super train links, International air links, Shipping	Theatre, ballet, Museums, art galleries, Orchestras

Appendix II

Method of deriving population thresholds suggested by Reed and Muench.

Thresholds can be derived through computations as well as graphically. Graphically derived thresholds for some of the facilities discussed in the text are illustrated in the following groups. The percentage values of towns having a facility and the percentage of towns that do not have the facility are plotted for various arbitrarily defined size classes of towns. In the graphs (Fig. 3), the x-axis represents size classes of towns based on census categories and the y-axis represents percentage of towns. Two lines are drawn (solid lines) representing percentage of towns having a facility and (broken lines) percentage of towns without the facility. The point of intersection of the two gives us threshold values of the facility (Ramachandran, 1976).

In each of the arbitrarily defined size-classes the number of settlements with and without a function is recorded. Cumulative frequencies of functions present at each lower level (P_s) and absent at each higher level (A_g) are then calculated. The percentage of settlements with the function in each size-class is given by $\frac{P_s \times 100}{A_g + P_s}$. The median population threshold (for which the percentage is 50) is estimated through interpolation such that threshold $= a + bc$, where: a = mid point of size class which records just less than 50, c = inter class distance and

$$b = \frac{50 - \text{percentage just below 50}}{\text{percentage just more than 50} - \text{percentage just less than 50}}$$

□

Urbanisation in Madhya Pradesh

A.C. MINOCHA

THE PRESENT state of Madhya Pradesh was constituted after the integration of a number of erstwhile princely states and parts of former British India. Its agricultural economy was feudal in character, a large part of land was under the control of non-cultivating landlords, some of whom had purchased land or won rights on it as a result of peasant indebtedness. Even today the state is characterised by semi-feudal relations of production, though capitalist form of production has emerged in certain parts of the state, particularly where modern inputs have been provided by the government through subsidies, infrastructural development, like irrigation, power and banking. Government programmes and its funds have played an essential role in helping this new class to increase its productive base. On the political side, the new institutions of panchayati raj, cooperative credit, educational institutions and village development institutions have helped this new class maintain its hegemony in a new way over the increasingly proletarianised rural majority. A new class of vested interests has emerged among the tribals and scheduled castes who constitute nearly one-third of total population of the state. The exploitation of tribals has been intensified in areas where new industrial units have come into being. The tribal economy has not yet been drawn into the vortex of money-commodity relationship. But the village traders and the wholesalers are thoroughly integrated into the overall industrial and commercial structure. One of the reasons as to why capitalistic farming has not yet developed as quickly as in Punjab and Haryana, is lack of infrastructure and irrigation facilities. A feudal or semi-feudal economy does not give rise to rapid urbanisation, although a few market centres and seats of administration may emerge on the scene. It is under capitalist farming where more surplus is generated, released and marketed, that towns may grow as market centres or where the capitalist may combine agro-industries or other urban occupations, along with agriculture.

The process of urbanisation in Madhya Pradesh (M.P.), though slow in many parts of the state, is more or less on the pattern of the whole country-haphazard, unplanned, exploitative and dysfunctional. The

spatial organisation is attuned to the requirements of growth-plus strategy and a high rate of capital formation, with towns degenerating into centres of exploitation of rural hinterland and focal points of suction mechanism. Our urban centres, by and large, have not generated growth impulses to their respective regional economies. The massive public sector investment in a few pockets in heavy basic industries have further helped in the concentration of population and activities in a few urban centres which are generally rootless, incapable of acting as agents of growth and change, without much trickle down effects. With the emergence of new class of contractors, traders, and government functionaries in the new and existing industrial and commercial centres, the towns are squeezing out maximum surplus from their respective hinterlands. The market towns tilt the terms of trade in favour of big cultivators and their trading partners. The exploitative mechanism exists right from the top of the hierarchy to the lower order settlements, with chain of intermediaries at different levels. The hinterland of new industrial centres is so poor and backward that it is not capable of taking advantage of the process of 'growth' initiated at these new centres. As for example, the so-called 'steel region' of India, comprising 17 districts with a population of 9 crores in four states of M.P., Bihar, Orissa and West Bengal, with steel plants at Bhilai, Bokaro, Rourkela and Durgapur, continues to remain backward with a few pockets of development, exhibiting economic and social dualism without identifying the forces which are holding back growth in the region, we are generally adopting universal remedies, as if investment by itself in a backward region would trigger off growth.

While the production process in the country continues to be strongly rooted in rural economy, the hierarchical organisation of space which is unplanned, is increasingly becoming top heavy in favour of big cities and consequently dysfunctional. The state did not witness anything like the Green Revolution except in a few pockets where there is assured water supply and this has led to accretion of population in a few market towns and also to the emergence of a few new towns. So far, the pursuit of identifying backward regions has been so single minded, that the need to understand the nature and causes of backwardness has almost been completely neglected. The urge to measure backwardness has drowned the need to analyse. Our whole approach to regional disparities has been ambivalent.

Urbanisation in India has taken place without any national urbanisation policy. A few scholars, have viewed this phenomenon as "over-urbanisation", a situation in which increase in urban population is not accompanied by a corresponding increase of workforce in non-agricultural sector.¹ McGee has termed this as "pseudo-urbanisation", to describe the

¹UNESCO Seminar, *Urbanisation in Asia and Far East*, Bangkok, 8-18 August, 1956, Sovani, N.V., "The Analysis of Over-urbanisation," *Economic Development and Cultural Change*, Vol. XII, Number 2, January 1964.

phenominal growth of cities, in the face of mounting unemployment, lopsided occupational structure, inequalities in the distribution of incomes and other assets, overcrowding in slums, mushrooming of squatter settlements and inadequate sanitary and transport facilities. One urban economist recommends the use of term "subsistence urbanisation",² implying a situation in which an average urban dweller is denied all amenities except the bare necessities of life and sometimes even these are denied. Kundu and Raza³ have used the term "urban accretion" which may be defined as "distorted growth of urban centres in relation to their own economic base on the one hand, and to the regional economy on the other."

Whatever name we may suggest, the process of urbanisation in India, by and large, is taking place in an unplanned manner in response to market forces. With the further dilution of planning in the country and amendment of industrial policy in favour of large business houses and multinationals, the industrial development would further encourage agglomeration in a few pockets of the country, with the object of exploiting the rural hinterland. The new industrial centres that are emerging are mostly in the proximity of existing big centres, without much forward and backward linkages. The four states of Maharashtra, Gujarat, Tamil Nadu and West Bengal, taken together, accounted for nearly 58 per cent of the total value-added by manufacture in the country in 1975-76. Even in so-called industrialised states, there are few pockets of industrial development. In fact, Maharashtra minus Bombay-Thane-Pune belt, is as backward as any other backward state of India.

Although we have been talking about regional planning in a multi-level planning framework since the beginning of the fourth plan, no concrete steps have been taken in this direction, with the result that there is no rational distribution of population between different sizes of settlements and no scientific location of functions and facilities. There has been very little sectoral and functional integration in our planning process. In more recent years, whatever little of the edifice of planning was left, has been diluted and we have been increasingly abdicating the field in favour of private sector, with public sector playing the role of providing necessary infrastructure to the private sector.

Madhya Pradesh is no exception to the model of urbanisation that has emerged on the Indian scene. Being relatively more under-developed, it manifests more heavily entrenched feudal interests, with slow rate of growth of capitalist mode of production. The resource-potential of the state is being exploited mostly by the outsiders in collaboration with the

²Breese, G., *Urbanisation in Newly Developing Countries*, Prentice Hall New Delhi, 1969.

³Kundu, A., and Raza, M., "Urbanisation and Regional Development in India", *India and the Soviet Union*, Allied Publishers, New Delhi, 1975.

local capitalists. The towns and cities are helping the kulaks and the petty bourgeoisie class in the process of exploitation of resource-potential of the state and the government is creating the necessary infrastructure for such an exploitation.

Table 1 shows the hierarchical organisation of space in Madhya Pradesh according to 1971 census data.

TABLE 1 SETTLEMENTS AND POPULATION IN MADHYA PRADESH

Population Group	Number of settlements			Percentage of Population		
	Rural	Urban	Total	Rural	Urban	Total
Uninhabited	6,031	—	6,031	—	—	—
1 to 199	19,754	—	19,754	6.22	—	5.2
200-499	27,276	—	27,276	26.10	—	21.6
500-999	16,516	—	16,516	32.83	—	27.3
1,000-1,999	5,952	—	5,952	22.73	—	19.3
2,000-4,999	1,292	7	1,299	10.26	0.41	8.9
5,000-9,999	87	90	177	1.53	10.09	3.0
10,000-19,999	6	72	78	0.33	14.37	2.5
20,000-49,999	—	41	41	—	19.81	3.2
50,000-99,999	—	11	11	—	10.26	1.7
1 lakh and above	—	11	11	—	45.06	7.3
TOTAL	76,914	232	77,146	100	100	100

SOURCE: *Census of India*, M.P. series 10—part II (a).

The table shows that the base of the hierarchy is rural, with 98 per cent of total number of settlements and 73.4 per cent of total population. At the apex of the hierarchy are 11 urban settlements, accounting for 45.06 per cent of total urban population and 7.3 per cent of total population of the state. The average size of population of settlement in M.P. is very small, 453 of rural settlements and 29,115 of an urban settlements. The settlements are scattered. This fact has led to increase in the unit cost of administration and has put the state to a disadvantage insofar as administrative expenditure on functions and facilities is concerned.

M.P. is one of the less urbanised states of India, with only 20.31 per cent of its total population as urban, compared to 35.03 per cent in Maharashtra, 32.98 per cent in Tamil Nadu, 31.08 per cent in Gujarat, 28.9 per cent in Karnataka and 27.7 per cent in Punjab, and 23.73 per cent in the country as a whole, according to 1981 census. The state is fortunate in one respect that as for urbanisation has not assumed any serious dimensions, despite absence of any urbanisation policy. The state does not have a single metropolitan city and the rate of growth of class I towns has slackened between 1971-81 compared to 1961-71.

Table 2 presents the decennial growth of total population, urban and rural population in the State since 1911.

TABLE 2 GROWTH OF POPULATION AND DECENNIAL GROWTH RATES IN MADHYA PRADESH

Year	Total population	Urban population	Rural population	Class-wise distribution of towns in M.P.						
				I	II	III	IV	V	VI	Total
1911	+15.30	-10.91	+17.78	1	3	8	20	56	22	110
1921	- 1.38	+10.87	- 2.26	3	—	10	23	50	29	115
1931	+11.39	+23.03	+10.45	3	2	11	30	53	37	136
1941	+12.34	+32.78	+10.49	3	5	16	31	69	38	162
1951	+ 8.67	+33.16	+ 6.01	5	5	22	35	72	55	194
1961	+24.17	+47.70	+20.95	8	5	30	56	93	16	208
1971	+28.67	+46.63	+25.68	11	11	41	72	90	7	232
1981	+25.17	+56.07	+19.16	14	28	41	113	104	3	303

SOURCE: *Census of India—1971 M.P. Series 10-11—part II (A).*

Census of India—1981 Series 11, Madhya Pradesh—Paper 1 of 1981.

Since 1951, the rate of growth of urban population has been much faster than that of total population. In 1971-81, the rate of growth of urban population has been the fastest, more than two times the growth of total population and nearly three times the growth of rural population. The 1981 census has revealed the highest rate of growth of urban population and a declining growth rate of rural population, indicating an increase in migration from rural to urban areas. During 1971-81, decennial growth has fallen by 6.52 per cent in respect of rural population and increased by 9.44 per cent in the case of urban population. Thus urbanisation in M.P. is rapidly on the increase, though the rate of growth has been marked by fluctuations.

Table 2 also indicates class-wise distribution of towns. Frequent changes in the concept of 'urban' in the censuses have rendered comparisons difficult between different censuses. A revealing fact is that M.P. is a state where majority of towns are small, with population of less than 20,000 each.

Table 3 indicates class-wise distribution of population and decennial growth rates by size-class of towns in Madhya Pradesh.

The growth of urban population has been 56.07 per cent during 1971-81, higher than any of the previous decades, as against 46 per cent growth of urban population in the whole country during the same period. The number of towns in the population range of 10,000 to 20,000 (class IV) has gone up considerably in the last three censuses. Similarly there has been an appreciable increase in the number of class

TABLE 3 SIZE-CLASSES AND POPULATION IN MADHYA PRADESH TOWNS

Size-class	Number of towns			Proportion of population in each class to total urban population			Growth rate-decadal		
	1961	1971	1981	1961	1971	1981	1961	1971	1981
All classes	210	232	303	100	100	100	47.70	46.63	56.07
Class I	8	11	14	39.1	42.05	46.84	70.2	69.12	62.23
Class II	5	11	28	8.2	10.26	18.00	76.5	83.05	173.85
Class III	30	41	41	20.6	19.82	12.24	32.0	41.04	-3.6
Class IV	55	72	113	16.2	14.37	15.13	33.4	26.44	64.30
Class V	96	90	104	14.5	10.08	7.67	5.8	38.75	18.60
Class VI	16	7	3	1.4	0.41	0.12	-28.2	-56.97	-54.75

SOURCE: *Census of India 1981—Paper I of 1981.*

II towns, in the population range of 50,000 to 99,999. There has been decline in the number of towns in the class VI.

The distribution of urban population among different size-class of towns and the proportion to total population, may show another interesting dimension of urbanisation in Madhya Pradesh. The predominance of class I towns in urban population is evident from the fact that percentage of total urban population living in these cities has gone up from 39.1 per cent in 1961 to 46.84 in 1981. In the country as a whole, a much higher percentage of urban population (53.38 per cent in 1971) was living in class I cities. The decennial growth rate of this class of towns has shown a decline from 70.2 per cent in 1961 to 69.12 per cent in 1971 and further to 62.23 per cent in 1981, though the number of towns of this class has gone up from 8 to 14 during the same period. The concentration of nearly 47 per cent of urban population of the state in only 14 cities, as compared to 53 per cent in the remaining 299 urban settlements, reveals imbalance in the pattern of urbanisation in M.P., even when only 20 per cent of total population of the state is urban.

A striking feature of the urbanisation process in the state is the rapid growth of class II towns, whose share in total urban population has gone up from 10.26 per cent in 1971 to 18 per cent in 1981 and whose decadal growth rates have been the highest in all the three censuses, much higher than the rates of growth in the country as a whole. The rapid growth of class II towns in M.P. may be attributed to factors like: (i) increase in the number of such towns from 11 in 1971 to 28 in 1981, (ii) a number of towns of lower class have jumped over the fence, and (iii) higher natural growth and in-migration due to expansion of commercial and industrial activities. The number of class III towns

(20,000 to 49,999) remains the same in the last two censuses, but their share in total urban population has gone down from 20.6 per cent in 1961 to 19.82 per cent in 1971 and further to 12.24 per cent in 1981 and their decennial growth rate has been negative (—3.6%) during 1971-81. This may be due to upward mobility of such towns in this class which were on the verge of becoming class II towns and their replacement by such towns of lower class whose population was just equal to the lower range of this class of towns. Of the 41 towns of this class, 19 towns had declining growth rate during 1971-81 to such an extent that it had offset the higher growth rate of 22 towns which had an increasing growth rate.

The table shows that urban growth is virtually confined to two size-class of towns, class II and class IV. Interestingly, class IV towns (population range 10,000 to 19,999) have registered a higher decadal rate of growth compared to class I towns, but their share in total urban population has increased only marginally from 14.37 per cent between 1961-71 to 15.13 per cent between 1971-81.

The rate of urbanisation depends on the difference between the rate of natural increase of rural and urban population, the extent of migration from rural to urban areas and the extension of the boundaries of urban centres concomitant with changes in the occupational and industrial characteristics of the population resident in adjoining areas. According to 1981 provisional results, reclassification of many villages as towns appears to be an important factor contributing to the acceleration of urbanisation during 1971-81. The total number of urban agglomerations and towns in M.P. has increased from 232 in 1971 to 303 in 1981. As expected most of the new towns (55) belong to class IV and V categories, *i.e.*, in the population range of 5,000—20,000 and do not make a very large difference in the overall proportion of urban population in the State. Of these 55 new towns, 40 belong to class V with a population of 2,88,455 out of 8,12,122, the total population of this class of towns, numbering 104 in 1981. But despite increase in the number of towns, the share of class V towns in urban population has come down from 10.08 per cent in 1971 to 7.67 per cent in 1981. This may be partly due to upward mobility of such towns of this class which were near the upper range of population to higher range and their replacement by such towns from lower-size class which were near to the lower range of this class of towns.

The relative share of a particular class of town in total urban population as well as decadal growth rate partly depended upon the number of towns in each size class with the rate of growth rate, increasing, declining or constant growth rate.

Table 4 presents the number of towns with decennial growth rate increasing, declining or remaining constant between 1971-81.

TABLE 4 GROWTH RATE OF TOWNS IN MADHYA PRADESH

Size-class	Number of towns with decadal growth rate					Number of towns having growth rate higher than the growth rate of urbanisation in state between 1971-81
	increasing	declining	constant	NA	Total	
I	7	7	—	—	14	3
II	14	13	1	—	28	10
III	22	19	—	—	41	2
IV	54	40	—	19	113	16
V	22	28	—	54	104	1
VI	—	—	—	3	3	1
TOTAL	119	107	1	76	303	33

SOURCE: Compiled from census 1981 data.

NA=Not available relates mostly to new towns whose growth rates are not given for the last two censuses).

Classes II and IV towns had higher growth rate of population between 1971-81, due to larger number of towns with increasing decennial growth rate and also with growth rates higher than the state average. Of the 14 class I cities, only three, viz. Bhopal, Durg-Bhilainagar and Raipur, have shown faster rate of growth than the state average, Bhopal being the capital seat of M.P and location of BHEL, Durg-Bhilai and Raipur because of location of steel plant. Important towns of M.P of this class, Indore, Jabalpur, Ujjain, Sagar, Bilaspur, Gwalior, Ratlam, Khawda, have grown at a rate lower than the urban growth rate in the state. In 1971, 6 out of 14 class I towns had decadal growth rate higher than the state average, in 1981, the number has come down to only 3. The slow growth of class I towns is a peculiar phenomenon, perhaps not to be found in most of the states and needs to be thoroughly probed when more data in respect of migration and occupational classification of workers become available. The contention of the Director of Census Operations, M.P., that there seems to be the end of the urbanisation cycle in class I cities of M.P. seems to be unwarranted. It may be due to lower rate of natural growth and lesser migration due to lack of expansion of commercial and industrial activities.

Among class II towns, numbering 28, 10 had witnessed higher growth rate between 1971-81 compared to the state urban growth rate. Of these 28, 14 towns had witnessed increasing growth rate, 13 had declining growth rate and one constant rate. The fast growing towns in this class are the new industrial and mining centres such as, Korba,

Dewas, Nagda, Balaghat, Khursia, Rajhara and Prasia.

Table 5 presents index of urbanisation in M.P along with India.

TABLE 5 INDEX OF URBANISATION IN MADHYA PRADESH AND INDIA

<i>Year</i>	<i>M.P.</i>	<i>India</i>
1901	8.6476	10.84
1911	6.6816	10.29
1921	7.5122	11.48
1931	8.2970	11.99
1941	9.8071	13.86
1951	12.0166	17.29
1961	14.2938	17.97
1971	16.2883	19.90
1981	20.3087	23.70

The table shows that index of urbanisation in M.P has been lower than the country as a whole and has manifested more or less the same trend as that in the country, the increase has been faster since 1951-61, consequent upon the formation of new State of Madhya Pradesh in 1956.

Table 6 presents the mean population size of different classes of towns in M.P along with India.

The table shows that mean population size of a town in M.P. has gone up from 12,982 in 1901 to 34,946 in 1981, the increase has been more rapid since 1951. It was virtually constant between 1901-1931. The average size of a town in M.P. is smaller than that of the country as a whole. Urbanisation has followed agglomerating tendency in M.P. since 1951. M.P. has towns of smaller size in each size-class of town compared to the country as a whole. The table shows that mean population of class I cities has gone up from 1,38,612 in 1901 to 3,54,279 in 1981. It remained more or less stagnant till 1931. The mean population size of class II towns has declined from 76,049 in 1961 to 63,277 in 1971 but increased to 68,075 in 1981 which is still lower than its size in 1951 and 1961. The mean population size of classes III and IV towns has remained more or less constant throughout the period both in MP as well as in India. The mean population size of classes V and VI towns has shown very slow increase.

The growth rate of rural population in M.P has declined from 25.68 per cent between 1961-71 to 19.16 per cent in 1971-81 and that of urban population has gone up from 46.6 per cent to 56.7 per cent during the same period. According to 1981 census, there are only 5 districts which have shown decennial growth of rural as well as urban population higher than the state average, 14 districts where urban growth has

TABLE 6 MEAN POPULATION OF TOWNS OF DIFFERENT SIZE-CLASSES IN MP AND INDIA

Year	All classes		Class I		Class II		Class III		Class IV		Class V		Class VI	
	MP	India	MP	India	MP	India	MP	India	MP	India	MP	India	MP	India
1901	12,982	13,000	1,38,612	2,27,700	88,381	67,000	30,463	30,000	13,571	13,700	6,817	6,900	3,934	3,300
1911	11,809	14,000	1,00,651	2,35,800	64,934	65,100	31,118	30,000	14,021	13,900	6,914	7,000	3,954	3,400
1921	12,523	14,000	1,09,264	2,36,700	63,120	64,400	33,652	29,700	13,424	13,700	7,013	7,100	4,015	3,400
1931	13,028	15,000	1,31,285	3,63,500	57,843	70,400	32,914	30,300	13,160	13,700	6,894	7,100	3,785	3,300
1941	14,523	18,000	1,88,175	2,86,900	67,577	65,100	27,006	29,500	13,327	13,900	6,757	7,200	3,654	3,300
1951	16,149	20,000	2,08,316	3,12,200	71,056	68,700	27,780	29,700	13,649	13,900	6,940	7,100	2,681	3,400
1961	22,246	29,000	2,25,918	3,28,300	76,049	68,600	31,772	30,400	13,769	12,800	6,991	7,500	4,072	3,300
1971	29,244	35,000	2,77,868	3,53,500	63,277	67,200	32,790	30,600	13,541	14,100	7,608	7,600	4,005	3,100
1981	34,946	NA	3,54,279	—	68,075	—	31,608	—	14,176	—	7,809	—	4,229	—

*Population by size-classes of towns for 1981 is not available.

been higher but rural growth rate lower than the state average, 17 districts where rural growth rate has been higher than the state average, 9 districts where rural as well as urban growth rates have been lower than the state average. By and large, growth rates are lower in Chhatisgarh region, particularly the tribal areas and the drought-prone areas. This may be due to out-migration of rural labour to other states, as a consequence of which there has been a decline in the percentage of agricultural labourers in the state in 1981 compared to 1971.

There are only 9 districts in the state where proportion of urban population to total population is higher than the state average in 1981. The following Table 7 presents the percentage of urban population in these districts and their ranking according to 1981 census:

TABLE 7 URBAN POPULATION IN NINE DISTRICTS OF MADHYA PRADESH AND THEIR DECENNIAL GROWTH

<i>District</i>	<i>1971</i>	<i>1981</i>	<i>Rank in 1981</i>	<i>decennial growth rate (71-81)</i>
1. Bhopal	—	76.26	first	73.99
2. Indore	62.71	65.92	second	44.16
3. Gwalior	51.63	55.20	third	38.45
4. Jabalpur	40.54	45.15	fourth	45.25
5. Ujjain	35.55	37.47	fifth	36.43
6. Ratlam	28.93	30.81	sixth	33.19
7. Khandwa	23.48	26.77	seventh	49.70
8. Durg	20.40	31.80	eighth	100.59
9. Chhindwara	16.72	21.18	ninth	57.86
State average	16.29	20.31		56.07

Of the above 9 districts, only three registered growth rates higher than the state average, others have grown at slower rates. The relatively more urbanised districts of the state mostly belong to Malwa and Mahakoshal sub-regions of the state which are relatively more developed both agriculturally and industrially.

The less urbanised districts of the State are given Table 8.

The less urbanised districts are predominantly tribal districts. But of the above 9 districts, two, viz., Sidhi and Bastar, have shown very high decennial growth rate of population. This may be due to low base of urbanisation and recent industrial activities particularly forest-based and extraction of iron ore in Bastar and location of power plant in Sidhi District. Higher growth of urbanisation in less urbanised districts and slower rates of growth in highly urbanised districts would lead to convergence in the level of urbanisation between different districts.

There has been gradual increase in the number of districts having

TABLE 8 URBAN POPULATION IN LESS URBANISED DISTRICTS OF MADHYA PRADESH

District	Percentage of urban population to total population		Decennial growth rate 1971-81
	1971	1981	
1. Sidhi	1.21	1.98	108.83
2. Panna	7.10	7.79	37.98
3. Mandla	5.57	7.06	50.21
4. Seoni	6.52	7.74	43.84
5. Balaghat	6.95	8.70	46.86
6. Surguja	6.71	8.18	59.07
7. Rajarh	5.94	8.14	59.62
8. Bastar	3.74	6.06	97.09
9. Dhar	10.17	12.60	55.26

SOURCE: *Census of India*—M.P. Series Paper I.

decennial growth rate of population higher than the state average, the number of such districts being 15 in 1951, 16 in 1961, 17 in 1971 and 21 in 1981. The process has been a gradual one, though in recent years it has been accelerated, due to the emergence of new industrial and commercial centres in the State. In 1981, 8 districts have maintained their ranks in respect of size of urban population that they had occupied in 1971, 12 districts have improved and 25 have fallen from their ranks they were occupying. This again shows a gradual reduction in inequalities in the urbanisation process in different districts.

We have measured regional variations in the level of urbanisation among different districts by means of co-efficient of variation, computed as the proportion of deviations around the mean. The following table presents co-efficient of variation among 43 districts of M.P. on the basis of 1971 and 1981 data:

TABLE 9 CO-EFFICIENT OF VARIATION AMONG 43 DISTRICTS OF MADHYA PRADESH

	(In percentage)	
	1971	1981
Total population	51.92	50.29
Rural population	50.23	51.62
Urban population	118.85	97.31

The table indicates that co-efficient of variation (CV) is high in both the years in respect of urban population among districts compared to total population and rural population. Whereas CV of rural population

has gone up, indicating increase in concentration of rural population, the CV in respect of urban population has gone down from 118.85 per cent in 1971 to 97.31 per cent in 1981, indicating narrowing down of inter-district variations in urban population. This significant decline in CV of urban population has brought down the CV of total population in the State from 51.93 per cent in 1971 to 50.29 per cent in 1981.

The CV in respect of different size-class of towns between 1901 and 1981 is given in the following table:

Table 10 showing Co-efficient of variations of different size-class of towns during 1901 and 1981

TABLE 10 COEFFICIENT OF VARIETIES OF DIFFERENT SIZE-CLASSES OF TOWN DURING 1901 AND 1981 IN MADHYA PRADESH

<i>Size-class of town</i>	<i>CV</i>
I	339.49
II	342.43
III	185.03
IV	204.57
V	117.26
VI	149.60

The table shows that the CV is the highest in respect of class II towns, followed by class I towns and is the lowest in respect of class V towns. There appears to be greater temporal variations in urban population in respect of class I and class II towns.

Table 11 indicates concentration ratios for relatively urbanised districts of Madhya Pradesh for different censuses.

The concentration ratio is high in districts like Indore, Gwalior, Jabalpur, Sehore (which included Bhopal till 1971 census), Ratlam and Sagar. In majority of the districts, the concentration ratio was less than one, indicating lower degree of urban concentration than the state as a whole. The CR has tended to decline in most of the districts.

In 1961, the mean population of towns in 14 districts was higher than the state average, in 1971, the number of such districts came down to 11 and in 1981, the number went up to 12. The decline in concentration ratios and the narrowing down of the gap between mean population size of town in the districts and the state average, is indicative of convergence in the level of urbanisation among different districts. But despite these trends, there is a wide gap between relatively urbanised and less urbanised districts of the state.

The process of urbanisation has been very slow in most of the districts of the State, 24 out of 45 districts have registered decennial rate of growth lower than the state average, of the remaining 21, 11 and just

TABLE 11 CONCENTRATION RATIOS FOR URBANISED DISTRICTS OF MADHYA PRADESH: 1951-81

District	Concentration ratios				Mean population of town		
	1951	1961	1971	1981	1961	1971	1981
1. Indore	4.9224	4.1969	3.8502	3.2460	1,13,020	1,28,579	1,85,361
2. Jabalpur	2.3782	2.5959	2.4892	2,2229	42,967	56,966	3,30,943
3. Gwalior	3.8911	3.4503	3.1698	2.7179	91,112	1,10,745	1,22,664
4. Sehore (including Bhopal)	2.0671	2.5196	2.5419	2.4437	38,820	64,172	1,28,440
5. Ratlam	2.4481	2.003	1.7758	1.5172	27,683	36,245	40,228
6. Sagar	1.5899	1.5971	1.5041	1.3730	22,588	28,917	33,510
7. Durg	0.3463	0.8741	0.9903	1.2006	29,444	36,100	49,686
8. Chhindwara	0.6238	0.8763	1.0264	1.0429	12,298	12,714	14,506
9. Khandwa	1.9395	1.5763	1.4416	1.3179	51,458	68,827	51,515
10. Bilaspur	0.3343	0.5828	0.6718	0.6815	16,843	24,283	51,123
11. Raipur	0.6049	0.7973	0.7636	0.8484	28,518	40,633	52,987
M.P.					22,246	29,244	34,946

Concentration ratios = $\frac{\text{District urban population}}{\text{District total population}} \div \frac{\text{State urban population}}{\text{State total population}}$.

marginally high and it is only in to districts that urban decennial growth is quite high. The growth of total population in M.P. has come down from 28.64 per cent in 1961-71 to 25.2 per cent 1971-81. Whether this decline is attributed to the success of family planning programme? The process of demographic change is so complex to warrant such plausible and simple conclusions. The growth of population is affected by inter-state net migration as well as changes in mortality and fertility. SRS (Sample Registration System) crude birth and death rates and child-women ratio, do not provide any convincing support to decline in fertility in M.P.

The states can be classified under fertility groups of low, medium, high and very high:

BIRTH RATES 1977-79

<i>Birth rates</i>	<i>States</i>
Low 25-29	Kerala (25.6), Maharashtra (26.7), Karnataka (28.1), Tamil Nadu (28.9)
Medium 30-33	Punjab (29.9), Himachal Pradesh (30.5), Bihar (30.8), Assam (31), J. and K. (31.5), Orissa (31.7), and Andhra Pradesh (32.5)
High 34-36	Rajasthan (34.7), Haryana (34.8) and Gujarat (35.9)
Very High 37-40	Madhya Pradesh (37.7), U.P. (40.0)

Both M.P. and UP account for 23.4 per cent of India's total population.

DEATH RATES

Birth rates

Low below 10

Medium 10-13

High 14-17

Very high above 17

States

Kerala (7.1)

Assam (12.5), Bihar (12.5), Haryana (12.6), Himachal Pradesh (11.2), J & K (10.8), Karnataka (11.2), Maharashtra (11.3), Punjab (10.8), Timal Nadu (12.9)

M.P. (16), Orissa (15.3), Rajasthan (14.4)

UP (18.5)

SOURCE: *Sample Registration Bulletin*, Vol. 14, No. 1, June 1981.

In M.P. the birth rate has come down from 39.2 in 1970-72 to 37.7 in 1977-79 and death rate from 16.9 to 16, hereby reducing the rate of natural increase from 22.3 to 21.7.

In the face of slow decline in the rate of total population in Madhya Pradesh, a much higher decennial growth of urban population, would pose problems of urbanisation for which the State has not prepared any policy and plan to tackle such problems imposed by urbanisation in the State.

Generally urbanisation is associated with industrialisation. But in M.P. it is not so much industrialisation as commercial and trading activities and services which have led to urbanisation. There appears to be no major shift in the percentage distribution of workers between different occupations in the state, as Table 12 shows:

TABLE 12 PERCENTAGE OF WORK-FORCE BETWEEN DIFFERENT OCCUPATIONS IN MADHYA PRADESH

<i>Occupations</i>	<i>Percentage of workforce</i>	
	1971	1981
1. Cultivation	52.86	52.10
2. Agricultural labourers	26.56	24.17
3. Household industry	3.64	3.80
4. Livestock, forestry fisheries, hunting	1.69	
5. Mining and quarrying	0.64	
6. Other than household	3.04	
7. Construction	0.79	16.94
8. Trade and commerce	3.20	19.93
9. Transport, storage, communications	1.39	
10. Other services	6.19	
TOTAL	100	100

The provisional totals of 1981 census have not yet given the breakdowns of "other workers". The percentage of workforce engaged in agriculture has declined from 79.42 in 1971 to 76.27 in 1981 and this decline is mainly caused by decline in percentage of agricultural labourers in the state from 26.56 per cent to 24.17 per cent in 1981. The percentage of workers in household industries has increased only marginally from 3.64 per cent to 3.80 per cent, despite emphasis on rural industrialisation in the five year plans. The category "other workers" includes those who are engaged in all activities other than agriculture and household industries. The percentage of "other workers" has gone up from 16.94 per cent to 19.93 per cent and this increase is mainly at the cost of agricultural labourers. The rural economy of the state continues to be characterised by lack of diversification.

Out of 45 districts in the State, only in 15 districts, the percentage of workers in household industries (HH) has registered an increase, in 1981 over 1971. In 12 out of these 15 districts, this increase has taken place at the cost of cultivators and agricultural labourers whose share in total work force in these districts has gone down, in two districts only at the cost of agricultural labourers and in one district at the cost of cultivators. Of the 30 districts which have witnessed a decline in the percentage of workers in HH industry, in 11 districts, the decline has been caused by increase in "other workers" and in 12 districts due to increase in percentage share of cultivators, agricultural labourers and other workers, in 5 due to increase in "other workers and agricultural labourers and in two districts on account of increase in the share of cultivators. The highest percentage increase in the proportion of household workers has taken place in Damoh district (+9.78%), followed by Sagar (+8.98%), Gwalior (+2.58%) and Bhopal (+2.264%). The increase in other districts is nominal, being less than 1 per cent in 10 years.

Not only is the proportion of work force engaged in "other occupations" low (19.93%), it is highly concentrated in few districts as Table 13 reveals.

The above 11 districts of the State have registered a higher proportion of urban to total population in 1981 as compared to the state percentage (20.31%). These 11 districts also account for higher percentage of "other workers" than the state average. Nearly 44 per cent of total "other workers" in the State are concentrated in these 11 districts which have relatively higher level of urbanisation than the state as a whole. If we take "other workers" in the urban areas, then 73 per cent of such workers in urban MP are concentrated in these 11 districts. If we take 14 class I cities of the State, then we find that about 51 per cent of total "other workers" in urban areas are to be found in these cities. The highest percentage of "other workers" to total workers in the district is to be found in Bhopal district (66.97%), followed by Indore (61.27%),

TABLE 13 PERCENTAGE OF URBAN POPULATION IN SELECTED DISTRICTS OF MADHYA PRADESH

<i>District</i>	<i>Percentage of urban population in 1981</i>	<i>Decennial growth rate 1971-1981 of urban population</i>	<i>Percentage of "other workers" to total workers in the district</i>	
			1971	1981
1. Gwalior	55.20	38.45	47.75	49.01
2. Sagar	27.88	41.67	21.42	22.91
3. Ratlam	30.81	33.19	24.76	26.19
4. Ujjain	37.47	36.43	30.48	32.07
5. Indore	65.92	44.16	60.58	61.27
6. Khandwa	26.77	49.70	20.98	23.63
7. Bhopal	76.26	73.99	63.85	66.97
8. Hoshangabad	25.05	43.24	26.88	29.21
9. Jabalpur	45.15	45.25	34.66	39.40
10. Chhindwara	21.18	57.86	18.38	20.34
11. Durg	31.80	100.59	20.46	27.65
State average	20.31	56.07	16.94	19.93

Gwalior (49.01%), Jabalpur (39.40%) and Ujjain (32.07). In fact these are the highly urbanised districts of the state.

Table 14 indicates the co-efficient of variations among districts of the state in respect of different categories of workers:

TABLE 14 CO-EFFICIENT OF VARIATIONS AMONG DIFFERENT OCCUPATIONS IN MADHYA PRADESH.

<i>Category of workers</i>	<i>Co-efficient of interdistrict variations</i>	
	1971	1981
1. Agricultural labourers	31.64	35.40
2. Cultivators	25.39	26.58
3. Household workers	58.52	99.13
4. Other workers	67.39	59.60

The table shows that the CV in household workers has shown the highest increase from 58.52 per cent to 99.13 per cent, indicating widening of inter-district disparities in 1981 compared to 1971. The lowest increase in CV has been recorded in respect of cultivators from 25.39 to 26.58 per cent. It is interesting to note that the CV of "other workers" has registered a decline from 67.39 per cent to 59.60 per cent, indicating dispersal of these workers among districts and thereby manifesting a reduction in inter-district disparities in the state. This is another indica-

tor of convergence in the level of urbanisation among different districts of the state.

An analysis of urbanisation in M.P. shows that decennial growth rate of class II and class IV towns has gone up and that of class I and other classes has gone down during 1971-81. Only 33 towns out of 303 have manifested growth rates higher than the state average. Of the total towns, 119 have show increasing decadal growth rate, 107 declining and one constant growth rate. There are 76 new towns. We have seen that class III and VI towns have witnessed negative growth rates and class I and V towns have shown declining growth rate during 1971-81. Thus we find that most of the small and medium towns in the state are languishing and with the exception of a few class I and II towns, even larger cities had a declining rate of growth, although the disparities between different classes and between different districts, have narrowed down. This has taken place without any conscious policy of the state in respect of urbanisation.

M.P. continues to be an under-developed state, with vast resource-potential which is being increasingly exploited for the benefit of the few. The pace of industrial and agricultural development has been slow in the 70s' compared to the 60s'. The per capita Net State Domestic Product at constant prices has come down from Rs. 488 in 1970-71 to Rs. 457 in 1978-79, a decline of .086 per cent per annum. The annual rate of growth of NSDP has been only 1.71 per cent. In the 70s' the annual average growth rate was 1.29 per cent compared to 8 per cent in Punjab and 6.6 per cent in Haryana. The productivity per hectare of important crops has gone down.

The state does not have a diversified industrial structure, as revealed by the dominance of six industries, viz., electrical machinery, generation and distribution of electricity, iron and steel, cement, paper and paper board and textiles, which accounted for 76 per cent of total fixed capital, 64 per cent of total employment, 66.4 per cent of total output and 78 per cent of total value added by manufacture, in 1975-76. There were only 13 relatively industrialised districts which accounted for 68 per cent of all industrial units, 98 per cent of fixed capital, 95 per cent of value-added by manufacture, 94 per cent of total output and 87 per cent of total employment in the manufacturing sector of the state in 1975-76. Moreover, in each of these districts, there is the dominance of one or the other industry. The fastgrowing industries are export-based, in the nature of iron and steel, electrical machinery, cement and a number of luxury goods industries. The lagging industries are mostly agro and forest-based. The multiplier of heavy and basic industries has not been very high and trickle down effects limited. Export led growth is bound to lead to concentration of industries and population in a few centres. The industrial structure of the state is lopsided and unbalanced, as revealed

by the dominance of a few industries which constitute the industrial core of the state. There has been little development of consumer industries. The agro-based industries are lagging behind because of lack of adequate demand. Indiscriminate subsidies and assistance are being given by the government and the financial institutions to all sort of industrial units in backward districts. Mostly industrial units are coming up in such backward districts which are within the proximity of large cities, like Dewas near Indore, Mandideep near Bhopal and Bamore near Gwalior. Most of the small units are also concentrated in larger cities. The distorted industrialisation has led to lop-sided urbanisation. Despite the stress laid in our five year plans on the development of rural industries as an essential ingredient of rural development strategy and despite a number of promotional and protective measures, the picture of household industries that we have seen, is really depressing. The policies and programmes for rural industrialisation have included measures without serious efforts to improve technology and productivity of these industries and the institutional framework of the rural economy, with the result that necessary conditions for realising the advantages of protective measures have not been created. No radical measures have been introduced in the rural economy to widen the demand-base of these industries. The so-called direct attacks on poverty involve just limited orders of financial transfers without corresponding curbs on accretion to the physical assets or consumption of the better-off sections. It is agricultural prosperity in a different institutional framework that can sustain rural industries and not the present highly skewed asset and income distribution. In the present exploitative society, household workers like other workers continue to be exploited by a chain of intermediaries. The spatial aspect of industrialisation, that is, location of units in relation to human settlements depending upon local resources and local markets, has not received the attention of the planners. An integrated rural development programme has not only to be sectorally integrated but also spatially integrated but in an altogether different institutional framework which generates incomes and employment for the bottom 30 per cent of population.

Most of the towns are market towns and their growth depends upon their economic base. It is agricultural prosperity in a different socio-economic setting that generate surpluses and provides market for industrial goods. Agriculture continues to be traditional, largely depending upon monsoons. Irrigation facilities are hardly available to 10 per cent of net cropped area. The cropping intensity is low. A large number of labourers from Chhatisgarh and also from drought-affected areas migrate to other states in search of employment. Feudal or semi-feudal conditions prevail in most of the areas of the state. Decline in the percentage share of agricultural workers in the total workers in the state

may be due to out-migration from the state. The 60s' had witnessed comparatively high rates of growth of agriculture and industry. This period had witnessed large immigration into M.P. in new industrial centres. The seventies witnessed sluggishness in growth rate.

The growth of small towns is linked with agricultural economy, the economic base. At the farm level, it means transition from subsistence agriculture to market-oriented agriculture, not only of a few big cultivators but also of small and marginal farmers who can be made viable and surplus-generating through appropriate technology and diversification of activities. Diversification of activities would create employment opportunities at larger number of centres which would serve as counter magnets to bigger cities and also can absorb the rural unemployed.

Urbanisation policy cannot be taken up in isolation from industrial, agricultural and infrastructural policy. For all this regional planning is needed. Towns and cities have to be viewed as essential parts of the settlement hierarchy. It would be worthwhile to study the process of urban growth in relation to structural changes in the agricultural sector.

For an optimal spatial equilibrium, it is necessary that each category of town is supported by a certain number of higher as well as lower order towns. The economic base of the region can be developed and strengthened not merely by techno-economic approach of delivery of package of inputs but through institutional changes of far-reaching importance. Dispersed and localised industrial activities with number of linkages yield better average income than large industrial projects unrelated to local economy.

Regional planning is possible only in a country where there is comprehensive planning and not in a country like India where planning has been gradually diluted and the society does not have complete control over the means of production and where the economy is moving according to the dictates of the dominant private sector. No wonder that urbanisation goes on in a haphazard manner in such a situation. □

Incorporation of New Tracts with Municipal Governments

SATYESH C. CHAKRABORTY

ACTIONS HAVE been taken in the past and are also being contemplated for the future to incorporate or amalgamate new territories with a pre-existing municipal government. For example, in the middle-twenties the tracts known as Cossipore and Manicktala were brought within the jurisdiction of the Municipal Corporation of Calcutta.¹ Transformation of Bombay Municipal Corporation into Greater Bombay Municipal Corporation is another instance in hand. It is also possible to imagine that places like Santoshpur or the Salt Lake City in the neighbourhood of Calcutta may get added to the territory of Calcutta Corporation in future. Yet one cannot believe that enlargement of areal jurisdiction of municipalities is a trend. Contrary evidences are available to show that some incorporated territories have been subsequently taken out of the jurisdiction of a given municipality. The case of Bally *vis-a-vis* Howrah is one such instance at hand. Naturally, questions have been raised in the concerned quarters as to whether one can discover a norm for an optimum size of a municipal area for purposes of issuing administrative orders for or against amalgamation.

The lay citizen may also be interested to search for a norm on amalgamation, because such actions have been known to produce mixed feelings for or against them. The citizens of the newly incorporated tracts may hope for better urban services against considerable enhancement of their municipal tax liabilities. Similarly, the citizens of the incorporating municipality may be threatened by their increased responsibility on extension of urban services. In many instances we have seen that the enhancement of the tax base of the incorporating municipality through such amalgamation has not been sufficiently large as to justify capital expenditure on urban services for the incorporated area at par with the rest of the city. One such instance is seen in the case of

¹For a detailed discussion of Municipal boundary problems see, West Bengal, *Report of the Municipal Finance Commission*, Vol. I, Calcutta 1982.

amalgamation of Tollygunge with the Corporation of Calcutta. Here, the act of amalgamation carried with it the liabilities of urban-renewal investments for the Corporation of Calcutta. There is no point in arguing that such investments were actually made by the Calcutta Metropolitan Development Authority and not by the Calcutta Corporation itself. From the citizens' angle, a more pertinent point would be to discover the kind of pro-actions that are necessary before amalgamation is given effect to.

The issues related to pro-action bring to the fore the views of diverse experts concerned in urban development management, which influence the opinions of both the lay public and the policy administrators about the reality. Inconveniently for the policy administrators, such experts approach the problem from their respective fields of specialisation. Some amongst them accept the idea of pro-action as a goal by itself to be pursued with a view to exempting the incorporating municipality of the future liabilities of investments for urban-renewal. This may be seen as a commendable ideal and can be achieved presumably by investing on development of urban services in consonance with urban sprawl. However, such an ideal cannot be pursued for two basic reasons. In the first instance, one must have an acceptable norm on the minimum level of services to be so provided. Such a norm does not exist in India. Secondly, this minimum level may appear incongruent with the level maintained by the incorporating municipality.

This brings the other kinds of specialists on the scene, who argue about the usefulness of having a service system for the areas experiencing sprawl that integrates itself with the system obtaining within the incorporating municipality. This can also be seen as a commendable ideal, but difficult to legitimise. The action presupposes incorporation as a logical necessity and encourages urban sprawl as an ideal by itself.

This brings another kind of specialists on the scene, who argue that the size of a service-area is sensitive to the principles of economy of scale at a given level of technology. Therefore, they suggest that there should be an optimum size of a municipal government, which will be given by the imperatives of technology chosen to maintain urban service efficiently and economically. As a normative prescription, such an approach appeals to many. However, this approach forecloses by assumption the possibility of technology substitution or simultaneous use of different technologies by a municipal government. Moreover, the threshold size of service-areas varies between the kinds of services and, therefore, a municipal government offering multiple services may be constrained to discover a common threshold-area for all services that will insure aggregate efficiency of investments.

For all the above reasons, the question of amalgamation of new

areas with pre-existing municipalities and, for that matter, the question of fixing a norm on optimum areal size of a municipality is difficult to answer. At the same time, the question is sensitive politically. In this paper, we wish to examine some of the cross-cultural experiences in this regard with a view to identifying the basic issues that should concern us. We also propose to identify some tasks and try to discover the means to handle these.

SOME BASIC ISSUES FROM OVERSEAS EXPERIENCE

Considering that the pragmatic policy-makers must arrive at some consensus at least between themselves, it is necessary that we list out the basic issues which are discernible in any cross-cultural study. These issues may be seen as objectives to arrive at through consensus. The decision makers could then claim that their's are derivatives of experience.

We may first note that an organisation, for that matter a civic government, must have a boundary of its domain of action. Translated in spatial terms this will mean that no tract can belong to the jurisdiction of more than one organisation which have to perform the same statutory functions. The corollary of this rule would then be that a tract may belong to the jurisdiction of more than one organisation performing different functions. The territory under the municipal corporation of Calcutta simultaneously belongs to the State Government of West Bengal or the Union Government of India, where each of these institutions perform clearly delineated functions without any overlap between them. Similarly, no tract within the jurisdiction of the Corporation of Calcutta can belong to any other municipality. Without a boundary, defined territorially and functionally, a civic government is forced to come into conflict with other similarly ordained organisations.

The above rule, when applied to resolve the question of amalgamation of territories, offers several opportunities. Consider the case of two territories to be amalgamated belonging to two municipalities. Then the first option is to abolish one of the two municipalities and authorise the remaining one to take charge of the total territory under consideration. The second option could be that a two-tier municipal government be created to look after the two territories, where the older jurisdictions are retained at the lower level of governance. The Calcutta Municipal Corporation Bill of 1979-80 is one amongst the many types of two-tier local self-government institutions that can accommodate such a game. The territory to be amalgamated would then constitute a borough under the new arrangement. Alternatively, new metropolitan government may be instituted to act as the upper level institution, while the older adminis-

trative arrangements continue in modified form for the lower level bodies. Tokyo metropolitan government is one example of this type of resolution. If the two territories to be amalgamated do not have the same type of local self-government institution, then the lower ordered institution has to be abolished at the time of incorporation. For example, a rural panchayat in India, intended to be amalgamated with a municipality, should be made to lose its status at the time of incorporation, provided that this rural panchayat had been created by a legislative of the State Government and did not draw its powers directly from the Constitution of India. If the above proviso appears to be the fact, then it would be difficult to establish that a municipality is a superior institution to a rural panchayat.

Institutional comparisons can help us to discover a second rule. It is seen that no society had ever considered the idea of fixing any limit, upper or lower, to the areal size of a city or of the jurisdiction of its civic body. The cities have grown following their own logic of growth, while the policy makers have deliberated upon the desirability of extending the territorial boundary of the city governments with reference to specific tracts at any given point of time. If it has been considered that a city has grown too large and that such growth should be restrained, then measures have been adopted to put restraints upon the factors of growth.

Under no circumstances has any society allowed urban growth without some civic-body regulating it. For example, the urban explosions that produced the residential suburbia in the United States of America were regulated by the County Government. In Japan or in France, such controls are exercised by the Prefectures.² In West Bengal, for that matter in India, neither the rural panchayats nor the Zilla Parishads exercise any control upon urban growth. Consequently, amalgamation of tracts, which have experienced unregulated urban growth, with a municipality carry with it disparate qualities of urban life. This is the very context to which are rooted all the questions that we have raised earlier regarding incorporation of territories. However, the situation does not call for any suspension of the process of incorporation. On the contrary, it really demands that no unregulated urban growth be allowed in any part of the country.

Overseas experience provide another rule with regard to controlling urban growth in non-municipal tracts. In every instance, the powers to regulate urban development vests in the institutions of local self-government. All instituted regions, like parish (village), country (district), towns, etc., have some form of local self-government which are empowered to exercise controls on settlement development. Even when

²Although prefectural systems exist both in France and Japan, these do not mean the same thing.—*Jt. Editor.*

a development agency has been especially set up, the norms sanctioned by the local self-government institutions are followed by them, unless modified by prior negotiation.

Not all countries have, however, avoided fully the discord in the quality of neighbourhood between settlements. The reason is rooted in the very process that entails urbanisation. A rural settlement may be basically constituted of places of residence. The residents work in the fields and rest in the villages. On the fringe of a growing town, such villages get caught up in the process of urbanisation. Initially, these remain as dormitory settlements, while the residents commute to the nearby towns. During this phase, shopping facilities tend to develop conspicuously within the village. These emerge as places of work within the settlement itself and require consequently somewhat different kind of services and infrastructural facilities. Gradually, centres of production or service industries tend to get located within the settlement and continue to act as places of work. Thus a pristine dormitory settlements gets transformed into an urban place. Such a process may make the earlier norms of settlement regulation obsolete.

The process of transformation of a village into suburbia is location specific, the instruments of regulation are best identified in the institutions of local self-government. It is true that all the institutions of local self-government may not be equally efficient or even alert to exercise proper control. For that reason, some societies have found it necessary to set nationally acceptable norms for settlement development. The role of the national Government in this regard is perhaps most elaborately defined in Japan. In Japan, a threshold population size has been nationally prescribed to acquire the status of a city by any settlement. All cities have municipal government. Other settlements have also some form of local government. But the control exercised by the Prefecture Government over the non-city settlements are more pervasive than what it is upon the city government.

Every city in Japan has within its jurisdiction the built-up area and also a considerable area which is not built-up. In such non built-up area, farming is practised and village-like settlements abound. In ancient time, when transport over long distance was a difficult art, the idea of keeping farm lands within the domain of city was justifiable, since the practice assured supply of food to the urban place. In modern situation, when transformation from agriculture of industry has reached a phenomenal proportion, the same practice has acquired a new meaning. It is the city government which has to regulate the use of land over all parts within its jurisdiction. How it exercises such powers is by itself a subject matter for study. For the present, we may just mention that conversion of wet land (rice-growing) into dryland (vegetable-growing) or conversion of dryland into built-up area requires specific licences from the city-

government. Similarly, partitioning of a plot requires sanction of the city-government. This then becomes an instrument for regulating urban sprawl.

Apart from exercising land use control, a city in Japan has to provide certain urban services to all its residents. These are potable water, conservancy, health and education. For all these services, there exists national norms from minimum service, which the city-government as well as the Prefecture Government are obliged to implement. Cities having rural settlements from where residents commute to the city are also found to extend transport facilities. This action is not governed by any national norm, but is a product of the institution of local self-government where interest groups negotiate such rights. Similarly, extension of fire-control services has taken place in many parts of the country. This means that the polity defined by the jurisdiction of the city-government, takes care of future extension of built-up area in consonance with the processes of urbanisation that operates in the given territory.

It is possible that a Prefecture Government in Japan adopts a policy that leads urban sprawl to cross the boundary of a city-government. The city-government is not obliged to service these areas through physical extensions of its own system. But, in most instances negotiations between the Prefecture government and the city-government, with or without the participation of the national government, are used to resolve such a problem. The negotiating parties thereby implicitly commit themselves for future incorporation of such tracts. But no incorporation obtains without the approval of the department of the national government on boundary adjustment. This department is presently in charge of the Prime Minister himself. Such is the order of importance that Japan attaches to the questions related to amalgamation.

It is possible to learn a lot more about incorporation from cross-cultural studies than what our departments of municipal affairs in India presently know. Hoping that the personnel of these departments will try to learn it by themselves, we propose to highlight another issue that is borne out of cross cultural experience. Incorporation of urbanised land with a pre-existing municipal government is a game that is basically rooted in the political economy of a given society. The game is not played by a charismatic leader who may be conscience stricken or morally afflicted by the distress of the people living in non-municipal tracts. The game is played opportunistically within the format of political economy. Take for example, the case of suburbia in the U.S.A. The Federal Government in the fifties and sixties provided easy loan for housing to boost up the real-estate trade. The construction industry was the major promotor of real-estate business. The residents of the suburbia worked in the city, but escaped the tax-liability. This does not mean that their

loan liabilities were less than what they would have paid as taxes to the city-government. So by not incorporating the suburbia, the Federal and the State Government of U.S.A. were merely assisting to transfer income from the city-government to the construction industry through the real-estate traders. The other advantage that the Federal Government obtained has been an increasing willingness of the city-governments as also the State governments to accept the terms specified for assistance from the Federal Government constrained as these were through fall in income and rise in civic expenditure. In real politik, the policy makers at the Federal level thus consolidated their control over the state level power-groups. This was much more fiercely opposed by the States during the period of New Deal than in the seventies of the present century.

OUR TASKS

Cross-cultural studies can certainly tell us how others have solved their problems. But these cannot tell us what our problems are and that which requires a solution. Neither can the experience of other countries discover the means to resolve our problems. We have to search into our own context and discover the means to resolve the problems to be so identified. There is no doubt that incorporation of tracts having undergone unregulated urban growth does create problem for the incorporating organisations. At the same time, the need for future incorporation shall persist. Hence the need to discover the means to reduce the magnitude of the envisaged problems will always face us.

In West Bengal, we have a statute—Town & Country (Planning & Development) Act of 1979—that empowers an authority, to be created by this statute, to regulate development, exercise land use control, etc., on all parts of the State. For this purpose, an area has to be declared as a Planning Area and an authority to be set up to exercise such powers. The provisions of this statute, we may opportunistically use to resolve the problem in hand. We may suggest that the fringe areas of all urban centres be declared as Planning Areas for purposes of this Act and the municipalities adjacently located be identified as the planning authority to exercise controls on urban growth on their respective fringe areas. The idea of empowering the municipalities stems from the inevitability of incorporation of such tracts with the existing civic bodies. They will, therefore, remain accountable to themselves for any distress to be caused by part neglect at the time of future incorporation of such fringe areas.

In order to be able to handle this task effectively and efficiently, policy options on a number of issues must be made. In the first instance, a given municipal government must be given a specific territorial jurisdiction to act upon. This means that the boundary of the planning-area

should be marked on a map. Secondly, the responsibility for maintaining regional drainage and transport systems in terms of arterial routes (canals, roads, railways, etc.), which will pass through and extend beyond this planning area, must be assigned to an appropriate institution. We consider that the State Government itself should act as such an institution. It will not only specify the alignments of roads and canals, but also, indicate the locations of the outfalls of drainage and water-bourne sewage systems. These alignments, once specified, may be seen as unalterable without the approval of the State Government. Thirdly, the rights of the owners of land to change the character of use be determined through licence to be issued by the planning authority, *i.e.*, the given municipal government. Fourthly, the State Government, from time to time, may prescribed policies on what kind of conversion of land use be encouraged or discouraged, which can be used as guidelines for issuing licences. Fifthly, norms on the minimum size of a plot for specific use should be available. These may be left to the given planning authority to decide upon. Finally, the planning authority may be permitted to transfer its responsibility for recovering development costs to the municipal government itself. The latter may use its own administrative department to recoup the cost by way of fixing appropriate rates for property taxation. On this issues, we consider that the principle of levying consolidate-rate will be desirable in preference against separating property tax from service charges.

The above suggestion will require a number of legislative and executive actions to become effective. Above everything else, this will call for radical evaluation of our practices and policies regarding the institution of local self-governance. Such an evaluation alone may make us aware about the advantages of empowering the non-urban local self-government institutions as well to obtain planned development of settlements in the country. It would be unwise and also expensive to set up separate development authorities to undertake the task of controlled development of settlement.

Before the norms on minimum acceptable level of services get designed, the above objective will be hardly realised. Hence actions on fixing minimum norm should be simultaneously initiated. The tracts which need immediate incorporation will pose a special problem therein. To relieve the incorporating civic-bodies of the unavoidable distresses, we may wish to provide these with the required capital to bring the level of service at par with the minimum norm. But, we really do not know whether the nation can afford to make such investments with immediate effect. The size of required investment may be too large. Nevertheless, these three tasks will continue to appear as minimum if we wish to tackle the problem of incorporation efficiently and effectively today or in the future. □

*Some Perspectives on Planning for Urban Development: A Case Study of a Mono-functional Town**

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IT HAS almost become a cliché for scholars to speak of Indian towns as 'under developed towns', 'developing towns' or 'problem creating places'. One of the main reasons "for such a state of affair seems to be lack of proper understanding and coordination among physical, social and economic planners in charge of urban planning".¹ This is more so in the case of mono-functional towns, in which one particular occupation constitutes more than 40 per cent of workforce, which are more prominent (constituting about 54 per cent of towns) in Karnataka. These towns, as compared to bi-functional and multi-functional towns, are more likely to be less developed (Table 1) for three major reasons: First, their close relationship with the main occupations of their people inevitably needs proper coordination between the physical land use plans (for the towns) and the sectoral economic plans for the occupations; which is lacking in the present urban planning in the country. Second, the nature of their economy is mostly determined by the main occupations of their workers. And finally, if the main occupations are economically not prosperous, these towns have no alternative source of development. Therefore, any programme or study dealing with the development of these towns should, as a first step, consider the following questions: What is the relationship between these towns and the main occupations of their workers? Have these occupations got any significant impact on the economy of these towns? And how these occupations should be helped to make them contribute to the development of these towns? The present paper attempts to analyse these issues in the context of Mahantpur, an under developed weaving

*The present paper is based partly on the Doctoral Dissertation of the author and partly on the data collected from secondary sources.

¹H.G. Hanumappa, *Urbanisation Trends in India*, New Delhi, Ashish Publishing House, 1981, p. 110.

town in Bijapur district in Karnataka, so as to draw certain meaningful inferences regarding developmental problems of similar towns elsewhere.

'Urban Development' has got a very wide meaning ranging from physical growth of a town to socio-economic wellbeing of its people. The various elements involved in the process are proper housing facilities, well planned streets, adequate amenities, segregation of work place and residence and so on. Since data on amenities—civic, health, educational, recreational and others—is available for towns in Karnataka, their development is understood only in the sense of these amenities. Therefore, development of a town is measured in terms of number of persons served per unit of amenity as compared to what it does in all other towns, but not as compared to ideally what it should do.² Thus, a developed town is one in which population served per unit of amenity is either equal or less than that in towns in general in Karnataka whereas an under developed town is one, which has no access to the amenity, or in which population per unit of amenity is more than that in towns in Karnataka.

Judged by these definitions, Table 1 shows that in 1971 more than half of the towns were under developed in respect of several amenities such as domestic electrification connections, latrines, colleges, vocational training institutes, beds in hospitals, public libraries and reading rooms. It means, developed towns constituted less than 50 per cent in these matters. Especially in respect of domestic electrification connections and colleges (Arts, Science, Commerce, Home Science and Education) they accounted for less than one-third and in the case of beds in hospitals they were still meagre (hardly 18 per cent). This indicates that in spite of several developmental programmes at work, urban development has not made much progress in Karnataka. This also endorses the need for studying why these programmes are not successful in bringing about enough urban development; hence this study.

A careful examination of Table 1 shows that the proportion of under developed towns increased with decrease in the number of their functions. For instance, in respect of beds in hospitals, under developed towns increased from 72 per cent in the case of multi-functional towns to 79 per cent and 89 per cent in the case of bi-functional and mono-functional towns respectively. This trend was also true in respect of other amenities, excepting public libraries. And this shows that the rate of development began to decline once a town tended to become homogeneous in respect of occupations for, if the main occupation was not prosperous, it would have not only affected the town's economy, but would have also left it with no alternative source of improvement. This

²For, it varies from one type of amenity to another type of amenity, from one country to another country and from one socio-economic background to another socio-economic background and is also highly subjective.

TABLE 1 DEVELOPED AND UNDERDEVELOPED TOWNS (IN TERMS OF AMENITIES) IN KARNATAKA BY FUNCTIONAL CLASSES (IN PERCENTAGE-ROUNDED UP)

Sl. No.	Amenities and population per unit of amenity (in brackets) in towns in Karnataka	Mono-functional			Bi-functional			Multifunctional			Total		
		D	UD	T	D	UD	T	D	UD	T	D	UD	T
1.	Domestic Electrification Connections (15 persons)	24	76	100	37	63	100	41	59	100	31	69	100
2.	Látrines-waterborne, etc. (27 persons)	34	66	100	42	58	100	44	56	100	38	62	100
3.	Secondary Schools (8,847 persons)	44	56	100	58	42	100	61	39	100	52	48	100
4.	Colleges—Arts, Science, Commerce, Home Science, etc. (37,485 persons)	14	86	100	37	63	100	48	52	100	29	71	100
5.	Vocational Training Institutes (16,719 persons)	28	72	100	63	37	100	43	57	100	36	64	100
6.	Public Libraries and Reading Rooms (12,237 persons)	50	50	100	47	53	100	46	54	100	49	51	100
7.	Cinema/Drama Theatres (15,416 persons)	48	52	100	53	47	100	67	33	100	56	44	100
8.	Beds in Hospitals (287 persons)	11	89	100	21	79	100	28	72	100	18	82	100
	Average (11,379 persons)	32	68	100	45	55	100	47	53	100	39	61	100

SOURCE: Compiled from *Census of India, 1971*, Series 14—Mysore, Part VI-A. Town Directory, pp. 72-84, 128-129, 142-165.

NOTE: "D" stands for Developed, "UD" for Underdeveloped and "T" for Total.

is an interesting phenomenon which confirms that the dominance of one particular occupation retards the rate of urban development. The 'why' aspect of this problem can be examined only by making specific case studies of mono-functional towns; hence the case study of Mahantpur here.

The selection of Mahantpur for our study is dictated not only by the fact that it is an under developed town (Table 2) but also because with its 30,014 population in 1971 and weaving background it represents the model group in the functional and the size classifications of the towns in the state.³

Before knowing how the dominance of one particular occupation, i.e., weaving, hampered the rate of development of Mahantpur, it is better to know something more about the relationship between the occupation and the town. For, it throws light on the question of whether this relationship has to receive any attention while planning for the development of towns.

TABLE 2 POPULATION PER UNIT OF AMENITY IN MAHANTPUR AND TOWNS IN KARNATAKA

Sl. No.	Amenities	Mahantpur	Towns in Karnataka (Total)
1.	Domestic Electrification Connections	22	15
2.	Latrines-Waterborne, Services, etc.	94	26
3.	Secondary Schools	10,005	8,847
4.	Colleges—Arts, Science, Commerce, etc.	30,014	36,712
5.	Vocational Training Institutes	30,014	16,797
6.	Public Libraries and Reading Rooms	30,014	12,237
7.	Cinema/Drama Theatres	10,005	15,449
8.	Beds in Hospitals	4,288	286

SOURCE: Compiled from *Census of India, 1971*, Series 14—Mysore, Part VI-A. Town Directory, pp. 128-165.

The relationship between the main occupation and the town was one of mutual complementarity. The occupation helped in the urbanisation of the town and the town gave steadiness to the occupation with its favourable socio-ecological factors. The presence of the employment

³In terms of functional types, 54.30 per cent were mono-functional towns, 7.75 per cent were bi-functional towns and 37.96 per cent were multi-functional towns. In terms of size, towns with population of less than 10,000 constituted 31.43 per cent, those with population of 10,000 to 50,000 constituted 60 per cent, those with population of 50,000 to 1,00,000 constituted 4.49 per cent and those with population of 1,00,000 and more constituted 4.08 per cent. See *Census of India, 1971*, Series 14—Mysore, Part VI-A. Town Directory, pp. 128-165.

potential industry like the handloom weaving attracted people from surrounding agricultural villages and also from the neighbouring Hyderabad-Karnataka districts, who had to leave their places due respectively to drought like conditions which affected agriculture and occurrence of two large-scale communal riots. The role of civic and other amenities and non-occurrence of any communal riot in Mahantpur are, of course, not to be overlooked. But the fact, that reduction of workforce in the handloom industry from 69 per cent in 1961 to 55 per cent in 1971 made the town lag behind other towns in the district in respect of the rate of urbanisation,⁴ confirms that handloom industry played a major role in the urbanisation of Mahantpur. It was, therefore, noted that over a period of seven decades from 1901 the town recorded more than three times increase in its population like many towns in Karnataka.⁵

Mahantpur, in turn, has several socio-ecological factors favourable for the localisation of industry. These are as follows:

1. Abundance of hard and salty water through 61 wells, which gives additional fastness to the colour of the town's fabrics.
2. Dry climate which helps in dyeing and weaving processes by minimising breakages of yarn.
3. Availability of raw materials through increasing transport and communication facilities.
4. Preference for *toap-teni* sarees of the town to millmade ones in Maharashtra state and in some parts of Bombay-Karnataka and Hyderabad-Karnataka regions.
5. Abundance of labour due to the numerical dominance of *Neygi* (weaving) caste people,⁶ who are also one of the oldest castes of Mahantpur.
6. Favourable market for finished products due to the dominance of Marwari traders in the product market and their abilities and talents to market any number of sarees that are produced.
7. Availability of finance to the weavers through the Marwari

⁴Decadal variation of population during 1961-71 was 34.38 per cent in the towns in Bijapur district, while that in Mahantpur was 23.91 per cent. See, *District Census Handbook*, Bijapur District, 1971, p. 8.

⁵*Ibid.*, p. 14. Over a period of seven decades from 1901, out of 166 places which were towns in both 1901 and 1971, 33 increased by less than two times, 89 by two to four times, 33 by four to seven times, 6 by seven to ten times and 5 by more than 10 times in respect of their population.

⁶In 1976, weaving castes such as Devanga, Padmasale, Swakulasale, Shivasamasale and Togatiga constituted 24 per cent of households in Mahantpur. This was quite a high percentage as compared to the share of these castes in the population of Bijapur district (which was about 12 per cent) and of Karnataka State (which was only 1.83 per cent). For Bijapur district and Karnataka State, See, *Karnataka Backward Classes Commission Report*, Vol. IV "Socio-Economic Survey Data", 1976, pp. 78-99.

traders, who previously depended upon a few big money lenders of their caste.

8. Inclination to weaving by many non-weaving castes due to the employment potential of the industry and influence of the numerically significant weaving caste people.
9. And, caste and kinship networks which attract one's own castemen and kinsmen from other places or from other occupations to the town and the weaving occupation.

All these factors in fact promoted in-migration into Mahantpur and spread of the weaving industry in and around the town. That is why Mahantpur could emerge as a weaving town and urbanise more rapidly than Hungund and Bagalkot,⁷ the nearest towns⁸ which did not have any labour intensive occupation like weaving as their main occupations.

As the weavers were the main source of revenue (by virtue of their numerical strength in the town) to the local municipality, which worked for the development of the town apart from administering it, a question regarding the role of weaving occupation in the town's development is inevitable. Before answering this question it is better to know the level of development of the town.

Table 2 shows that Mahantpur had several amenities such as electricity, sanitary, health, educational, vocational training and recreational. But many of them were not adequate to meet the needs of the people in the sense that population served per unit of amenity was more in Mahantpur than in other towns in Karnataka in general. For instance, a secondary school had to serve educational needs of more than 10,000 people in Mahantpur, while it served less than 8,850 people in towns in general in Karnataka. So also, hospital beds, domestic electrification connections, vocational training institutes and public libraries were not adequate to the needs of the people. Besides, Mahantpur could not get some amenities like an English medium school, a kindergarten, access to railway station and a hospital till 1980, though a demand for these was felt and made by its municipality as far as a decade back.⁹ All this shows that Mahantpur, though had urbanised rapidly in terms of population growth, was not adequately developed in respect of the amenities.

⁷Average percentage decadal variation of population during 1901 to 1971 was 12.86 per cent in Hungund, 18.39 per cent in Bagalkot and 18.79 per cent in Mahantpur. From *Bijapur District Census Handbook 1971*, p. 8.

⁸*Ibid.*, pp. 80-89.

⁹'Mahantpur' *Municipality Centenary Celebration Souvenir*, edited by B.A. Bijjal, 1968, pp. x-xix and 23.

This underdevelopment, according to the members of its municipality (who were interviewed), was mainly due to the lack of funds to provide more amenities, though there were also other reasons like lack of political support to the town after the death of its prominent leader (who was also a minister of the state for more than a decade). The municipality further attributed its financial inability to the numerical strength of the weavers in the town, who were not paying house taxes regularly. In spite of an interest being charged on the taxes for not paying regularly, most of the weavers used to postpone the payment for four or five years. For, they were not economically well-off. A huge majority of them were poor with a per capita income of hardly rupees four hundred in 1975-76. This is quite a low figure as compared to that of India (which was Rupees 1004.9) and of Karnataka (which was Rupees 1003.08) for the same year¹⁰, and also of Bijapur district (which was Rupees 607) for the preceding year.¹¹ There were many reasons for this which need no mention here. This shows that, though weaving contributed to the urbanisation of the town due to its high employment potential combined with traditional technology, it did not help the people to thrive on it and contribute to the further development of the town.

Therefore, a development programme for the town should inevitably combine the development of the town and the development of the main occupation in the most desirable proportions. Besides, some dual purpose schemes, which have the impact of boosting the main occupation and thereby the development of the town, should be thought of and implemented. Some such schemes in the present context would be providing electricity, tap and drainage facilities to houses of the needy weavers and collect the cost incurred in instalments. These schemes would help not only the town to develop but also the main occupation to flourish. For instance, providing electricity would not only increase the number of electrified houses in the town contributing thereby the town's development, but would also motivate the weavers for hardwork by saving a fraction of their expenditure on lighting and also giving more light than the erstwhile kerosene lanterns. Besides, a railway facility to the town, as it had no access to it within the radius of 50 kilo metres, would not only attract people for commercial and other purposes but would also facilitate the transportation of yarn, dyes and sarees at cheaper rate than through buses. This would also reduce the cost of importing raw-materials and exporting finished products and thereby the price of the finished products. This would give some support to the handlooms against the competition of mills and

¹⁰ *India, a Reference Annual, 1977-78*, New Delhi, Ministry of Information and Broadcasting. Government of India, 1978, p. 161.

¹¹ *Statistical Abstract of Karnataka, 1976-77*, Bangalore, Bureau of Economics and Statistics, Government of Karnataka 1978, pp. 297-299.

power looms. Above all, elected members of the municipality should mainly come from the weaving occupation, at least to the extent of its share in the town's workforce, so that they can take care of both the town and the main occupation.

Thus if planning for the development of the mono-functional towns takes note of the relationship of these towns with the main occupations of their workers and tries to bring out a proper coordination between the physical land use plans and the sectoral economic plans, the highest percentage of the under developed mono-functional towns is no more to be worried about. Though such steps are needed for other towns also, their importance for the numerically significant mono-functional towns is greater in view of the highest degree of under development characterising them and the non-availability of better alternative to them to improve their economy and to develop themselves. □

Role of Municipal Councillors in Urban Development

MOHIT BHATTACHARYA

THE PURPOSE of this paper is to focus attention on the role of elected municipal councillors in urban development. It is our contention that both our macropolitical culture and the inherited design of municipal government have stood in the way of enlisting the energies and visions of the elected municipal councillors. A more enlightened conciliar role is necessary to come to grips with the complex urban problems, for which imaginative training programmes need to be mounted at the state level.

'Political will' is one of the many elusive phrases in the vocabulary of political science. Its presence or absence, however, affects the outputs of a political system. In the context of national, regional and local development, the cruciality of political will is generally acknowledged. It is conceived in terms of an orientation toward action affecting the future course of events in a society. Presence of political will connotes a commitment to action by the political leadership of the day. Contrarily, its absence means a lack of commitment. Land reforms is an area where the absence of political will has been conspicuous. At the level of the urban area, political will would mean a certain action orientation on the part of the municipal councillors to grapple with the myriad problems of urban development. It is common knowledge that growing urbanisation especially in and around the big cities has been throwing up major problems of planning and development. The Indian city is in the midst of a crisis. All the major cities are showing signs of a near breakdown of civic facilities in the face of mounting demographic pressure. The urban crisis offers a challenge to local political leadership. It is by now clear that technical and managerial responses alone cannot solve the problems. Political capacity is badly needed to harness community resources and fight the urban problems out. It requires a dynamic political will at all levels to perceive the urban problems and mount an all-out attack on them. So long as political will is an acquired thing and grows out of

experiential circumstances, training of councillors is important in influencing the urban leadership and orienting it to positive action.

Since the introduction of Panchayati Raj, training of the elected members of PR has been considered important, and national and state institutes have been set up to train as many of the 'non-officials' as possible. By contrast, training of municipal councillors has been in existence since the middle of the last century. In the late sixties, centres of training and research in municipal administration were set up at Delhi and a few other State capitals. Municipal training seems to have been catching up and many states have set up training centres for the purpose. A hurried glance at the curriculum of these training centres shows an inordinate emphasis on the training of officers, as distinguished from elected municipal councillors. Occasionally, two-to-three day seminars are conducted on specific municipal issues such as 'property taxation', "relationship between deliberative and executive wings" and so on, where a sprinkling of councillors would sit along with other groups including officers and experts. Exclusive training programmes tailored to the special needs of the councillors are rare.

The training of municipal councillors has not received the attention it deserves. The neglect is due partly to a lack of proper appreciation of the multiple roles that a councillor plays in the municipal set-up. Unlike other levels of government, the municipal level is peculiarly councillor-dominated. The governmental design explicitly acknowledges the supremacy of the elective element and the subordination of the municipal bureaucracy to this element.

Training means preparation for better performance. The municipal system in India would rather like to reject the elected councillor than expect better performance from him. There is a historical legacy of bureaucratic government. At the higher levels, the politician has assumed positions of power according to a constitutional arrangement. At lower levels, especially in corporation form of city government, the councillors have been reduced to the status of a limited elite by the structural design of the government. The behaviour of the State Governments also has generally been anti-local government, whatever might be their verbal pronouncements. Limited functions and funds, bureaucratic primacy, and state apathy are the major reasons for the continued neglect of the municipal council and the councillors.

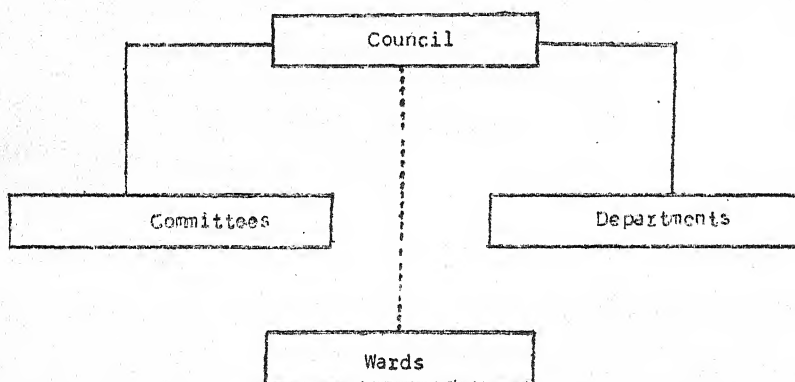
Municipal administration is exposed to the direct gaze of the councillor at several points. In this form of 'open government', it is useless to talk of deliberative-executive separation. What is needed is a healthy convention of a working partnership between the elective element and the appointed one. On both sides the situation demands a mature understanding of the respective roles and the relationships without which the system cannot work. As the history of municipal government in this

country shows, there have been frequent clashes, conflicts and misunderstanding between the two elements. Instead of trying to develop a culture of complementarity, each element has sought to rule over the other leading to the steady growth of a culture of mutual suspicion and studied avoidance.

COUNCILLORS' ROLES

The councillor is an essential element in municipal administration yet his role is least understood. If any training programme has to be launched for the councillors, the roles they actually play in municipal administration have to be properly appreciated.

The Councillors' roles can be looked at both structurally and functionally. *Structurally*, municipal administration can be dissected into its component parts in the following way:



The *Council* is the legislative forum basically concerned with budget and taxation, confirmation of committee resolutions, external relations with the State Government and other agencies, over-sight of administration, and accountability of administration.

It is well known that the *Committees* play an important role in the municipal set-up combining deliberative and executive functions. There are often both staff and line committees such as finance and personnel and water supply and health. The Councillors in close consultation with the municipal officers discuss administrative and policy issues in these Committees that are referred subsequently to the Council as a matter of reporting. In larger municipal bodies, the committees constitute the heart of municipal administration, and the efficiency of committee functioning largely determines the efficiency of the municipal body as a whole. This is particularly true of the municipal corporations and the Western Indian municipalities (e.g., Maharashtra and Gujarat).

The *Wards* are generally known as electoral constituencies. But, they serve multifarious purposes. In some municipalities, there are specified budgetary allocations for works to be undertaken within a ward. The councillor of that particular ward takes a great deal of interest in proper spending of the earmarked sum. Certain activities like sanitation are often ward-based. In the interest of his constituents, the Councillor *informally* supervises the municipal activities at the level of his ward. Besides, the ward is the central focus of attention of the Councillor and he 'nurses' it carefully to ensure citizens' satisfaction and his own political future.

Between the 'ward'* and the municipal headquarter, an intermediate tier has been set up in many big cities like Bombay, Delhi, Calcutta, and Baroda. Where the intermediate tier is a mixture of administrative and political elements, as in Delhi, the councillors are to play their roles at three levels—the ward, the intermediate tier (*e.g.*, zonal committee in Delhi), and the council. Many area (zonal) level decisions are taken at the level of the zone in Delhi jointly by the administrators and the area councillors.

The *administrative departments* vary in number and complexity depending on the size, location, finances and functions of the municipal bodies. The departments are usually looked at as the domain of the municipal officers. Actually, however, as some research studies point out, there are close connections between the departments and the councillors, especially when the latter act as a 'broker' between his constituents and the administration. The municipal officers, in their turn, have to rely on the councillors many a time for local data and information and political interventions in administrative situations. In the municipal administrative world, there is a close nexus between the administrative departments and the municipal councillors.

The structural description needs to be extended in the light of new developments in the Corporation set-up in recent times. In West Bengal, Calcutta and Howrah are soon to have a Mayor-in-Council system which is a close approximation to the Cabinet form of government. Under this set-up, the Mayor and other members of his Cabinet will be playing a role similar to what we are used to seeing at the level of state and national governments.¹ Judging from the reactions of the All-India Council of Mayors, it seems the Mayor-in-Council form of municipal government will spread to other big cities in India in the not-too-distant future.

*Wards are grouped into a second-tier unit in some municipal corporations. Delhi has the Zonal Committee system based on a cluster of wards formed into zones. In the new legislation, Calcutta is going to have ten 'boroughs' as second-tier units.

¹See in this connection, *Nagarloka*, Vol. XIII, October-December, 1981, No. 4 (Special issue on Mayor-in-Council).

These structural round-up offers cues for the kinds of functional roles the councillors play in the municipal set-up.

EMPIRICAL STUDIES

Studies on the roles the councillors actually play in the municipal arena are very few. As a recent survey of research points out:

While quite some work has been done on rural leadership, there have not been adequate studies on urban leadership commensurate with the growth of municipalities and corporations. This is a big lacuna especially in view of the fact that, as time passes, cities are turning into veritable problem areas for policy-makers and political leaders.²

Against this background of paucity of researches, findings of a few case studies can be reported. Ali Ashraf referred to the strange duality in the councillors' roles in Calcutta. When it came to examining civic projects in detail, "the councillor members of the committees and the councillors of the Corporation had hardly any time to go through the intricacies of a matter". By contrast, "councillors do seem to show considerable activity and vigilance where their particular ward or other interests are especially affected..."³

Referring to the Lucknow councillors, Roderick Church observes: "Councillors are essentially intermediaries between the public and the municipality in routine administrative matters...Although city councillors and legislators everywhere spend some of their time doing these things, virtually the entire job of the Indian city councillor revolves around administration. In describing their jobs councillors usually show little concern with policy, general issues or matters that do not concern the immediate allocation of municipal services. Instead, they are output oriented and concerned with administrative demands and the outcomes of administrative decisions."⁴

Rosenthal's study of Agra and Poona corroborates this view point. To quote Rosenthal, "Much of the corporators' actual work involves efforts on their part to particularize bureaucratic performances. Pressures may be exerted on local administration by local groups, through friendly officials or ministers in the state government through party con-

² *A Survey of Research in Political Science, Volume one: Political System*, Indian Council of Social Science Research, 1979, p. 121.

³ Ali Ashraf, *The City Government of Calcutta: A Study of Inertia*, Asia Publishing House, 1966, pp. 50-51.

⁴ Roderick Church, "Authority and influence in Indian Municipal Politics: Administrations and Councillors in Lucknow", *Asian Survey*, XIII, No. 4, April 1973.

tacts, but the most institutionalized form of making demands on the municipal administration is through the corporators. Indeed, many corporators see such activities as the primary aspect of their role".⁵

A very detailed study of the councillor's role has been made by Philip Oldenburg in a quasi-anthropological survey of selective 'wards' of the Municipal Corporation of Delhi.⁶ Oldenburg has noted the operation of both the councillors and the officers in all three arenas: the ward, the zone, and the headquarter. Talking of the zonal committee meetings, he observes:

The councillor and officer are brought in contact during the meetings of the zonal committee. Typically, the councillor will meet with particular officers just before or just after the meeting; they meet at the councillor's 'call' in the committee room or the councillor may go to the officers' office. Officers are called to the ward on inspections and for discussions of special projects. They will call on the councillor when they are in the ward, especially if they are there to inspect a project. And the councillor will phone the officer as needs arise.⁷

At the 'ward' level the councillor is directly concerned with the administrative process, and operates in close relationship with specific administrators. To quote Oldenburg, "In the Ward, the councillor is the pivotal person in council—citizen interaction. It is at this level that the citizen has the greatest access to the governmental process, but largely because the councillor brings the government to the citizen in the form of himself and ward-level administrators, on regular 'rounds' of the constituency."⁸

Oldenburg's study reveals a number of distinctive roles that the councillors play in the different arenas of municipal government. As an *Ombudsman*,⁹ the councillor receives various complaints from the citizens about municipal administrative lapses and seeks to influence the processes of administration informally. As a *mediator*,¹⁰ the councillor is a linkman between the citizen and the administrator. He interprets the problems of his constituents and asks the officers to attend to those. The officers often find his role helpful, as they feel that he

⁵Donald B. Rosenthal, *The Limited Elite: Politics and Government in Two Indian Cities*, The University of Chicago Press, 1970, p. 119.

⁶Philip Oldenburg, *Big City Government in India: Councillor, Administrator and Citizen in Delhi*, Manohar Publication, New Delhi, 1978.

⁷*Ibid.*, p. 195.

⁸*Ibid.*, p. 73.

⁹*Ibid.*, p. 72.

¹⁰*Ibid.*, p. 105.

knows the people and the locality very intimately.¹¹ Sometimes, of course, the councillor is disliked and dubbed as an unwanted interloper. As a *supervisor*, the councillor keeps a watch on what the officers do at the ward level. He is an actor in the administrative process. The basis of his power over the officers, as Oldenburg points out, is threefold: "the councillors expertise, his influence over transfer and promotions of officers and his ability to 'expose' or 'slander' the officer."¹² Then there is the *political* role of the councillor which is all-pervasive. In normal times, he nurses the constituency, and at the time of an election he works explicitly for his own as well as his party's prospect.¹³ The *deliberative* role, which is distinguished from the *executive* role, is associated with deliberation, legislation and policy-making. To an administrative purist, the councillors belong to the 'deliberative wing' and normatively they should not encroach upon the 'executive wing'. At the meetings of the Corporation and its committees, the councillors do actually discuss many things. But, as Oldenburg points out, 'deliberation' does not stand opposed to the 'executive' function; it is indeed part of it.¹⁴ Further down at the ward and the zonal levels the councillor *is* municipal administration.

Another important role of the councillor is to *conduct external relations*. In a multi-institutional set-up in an urban complex, the more influential councillors relate the municipal administration to the state government and other urban level organisations such as an improvement trust or an urban development authority.

MUNICIPAL COUNCILS

The Corporation form of municipal government in our major cities envisages multiple conciliar roles at different structural and spatial levels. The mayoral role, for instance, is largely ornamental; yet the mayor has to keep abreast of corporation operations, conduct meetings of the corporation, and maintain contacts with outside agencies (e.g., state government). The committee chairmen play important roles in conducting the meetings and relating the committee deliberations to the needs and processes of administration. Individual councillors, as described earlier, influence municipal administration basically to satisfy the needs of their constituents.

In other (non-corporation) municipal councils, the role of the municipal chairman is of crucial importance. The chairman is *really* the executive head and in this capacity he supervises and controls the entire

¹¹Philip Oldenburg, *op. cit.*, p. 197.

¹²*Ibid.*, p. 73.

¹³*Ibid.*, p. 242.

¹⁴*Ibid.*, p. 321.

municipal administration. This is in addition to his 'chairman' role vis-a-vis the meetings of the council. The appointment of an executive officer (named differently in different states) has been as much a help as a hindrance. The executive officer is expected to execute the decisions of the council and its committees and supervise the municipal administration generally. Functionally, the responsibilities of the executive officer and those of the municipal chairman are the same. Structurally and formally, however, the chairman is the head of municipal administration and the executive officer functions under the general control and supervision of the chairman. The intention of having an executive officer is to provide professional administrative support to the chairman who is after all a politician and a part-time amateur administrator. The fact of the matter is that he is a support and not a substitute. His 'relationship' with the chairman or how he conducts himself in the day-to-day contacts and consultations with the chairman has decisive influence on the shape of municipal administration. Possibilities of conflicts and clashes between these two roles are far too many in the municipal administrative situation. Culturally, the executive officer and the chairman may be incompatible. The professional pride of the former is likely to be at loggerheads with the political ambition of the latter. Each perceives the 'problems' differently. To the chairman, the citizens' demands, even if unrealistic and often 'illegal' have more than mere administrative significance. He has to carry the councillors along and 'appease' them for his political survival. By contrast, the executive officer tends to rely on his professional skill based on formal administrative 'norms'—the laws, rules and regulations. There is a deepseated feeling among the executive officers that the chairman belongs to the 'deliberative wing' and as such should not 'interfere' with administration. In the states having unified or integrated municipal cadres, the executive officer comes from 'outside' virtually as an agent of the state government. The personnel system has a built-in tendency to make the executive officer state-oriented as distinguished from municipality-oriented. In such a situation, the executive officer is likely to imagine himself as an officer of the state government sent down to set right the 'delinquent' councillors and the messy municipal administration. He is unlikely to accept the formal supremacy of the chairman and would like to assert his position as a natural superior because of his linkage with state administration. If anything goes wrong, his instinctive reaction would be to bring the wrong-doings to the notice of the state government. This sort of perceptual dissonance is very common in many municipal situations. It is not being suggested that everywhere the chairman and the executive officer are on the war path. Structurally and perceptually, the two roles are more prone to falling apart than working together.

An organisation is a cluster of interrelated roles. The structure of a municipal body consists of a variety of roles. Their orchestrated functioning is necessary for successful production of results. Continued coexistence is likely to lead to an understanding of each other's role in municipal administration. Mutual role perceptions can be taken up in a training situation, as distinguished from an actual work situation. Imaginative training programmes can be useful in simulating role rehearsals and stimulating understanding of the institutional role requirements.

The functional roles of councillors on the basis of *what they actually do* can now be summarised as follows:

The Ombudsmanic Role: The councillor acts very often as the grievance-redressal man for his constituents, as they complain to him against municipal administration. The complaints may relate to property tax rate, water supply connection, licence and so on and so forth. At the level of the ward, this role is most conspicuous.

The Managerial Role: Especially as committee members, the councillors have to deal with administrative management relating to specific functions such as water supply, parks and playgrounds, health and sanitation, etc. The committee provides a forum for councillors' participation in decision-making. As chairmen and members of important committees like the finance committee, the personnel committee and the development committee, the councillors are expected to understand the administrative and financial situations very carefully and take significant decisions affecting the city's current and future conditions. The city's relationship with external agencies are also looked after by the influential councillors. In this respect, they are the city's external affairs ministers. This is an institutional responsibility that can be best shouldered by the elected councillors.

The Legislative Role: A councillor *qua* councillor essentially belongs to the whole body—the council. The legislative functions of the council demand policy sensitivity and an olympian view or city-wide concern, as distinguished from wardwise view. For successful role-playing, the councillor has to be familiar with the city's major problems and should be capable of analysing data and information.

The Political Role: Because of the interplay of political forces *via* parties, pressure groups, caste groups, etc., the councillor gets involved in conflict situations. His political role impels him to view things from *partisan* points of view. He brings to bear all kinds of pressures on 'administration' which are often considered undue 'interferences' by the officers. Essentially, the councillor is a political

animal, and the way he behaves has important implications for city administration. The officers, in their turn, must understand the political role of the councillor and try to cope with it.

Any meaningful councillor role in urban development needs the break-up of imaginative training programmes, keeping in mind these multiple counciliar postures in municipal institutional situation. ☐

Have Rickshaws Outlived their Necessity in Calcutta?

D.K. HALDER
and
SATYABRATA BASU

ON 21ST SEPTEMBER 1981, the West Bengal Assembly passed a legislation amending the Hackney Carriage Act of 1919, which on receipt of the Governor's assent would become an Act and which intends to ban the unlicensed rickshaws in the Corporation area of Calcutta. The legislation, in fact, tolls the death-knell of rickshaws as a transport mode in the city life. According to the enactment, such rickshaws shall henceforth be confiscated and destroyed.* As stated by the Jt. Commissioner of Police, Calcutta, the Police has started taking steps in this direction, and by June 30, 1982, all unauthorised rickshaws within the city shall be seized. The programme is a part of overall scheme of a campaign against "Hawkers on the Roads and Pavements and Slow Moving Vehicles on the streets" and presumably aims at ensuring smooth flow of traffic in the city. The present paper deals with the aspect of "banning of the unlicensed rickshaws" and attempts to highlight how far such a decision would pave the way of a better and healthier civic life in the metropolis.

LICENSED VS. UNLICENSED RICKSHAWS

Within the corporation area and a little beyond, the hand-rickshaws are permitted to ply and no cycle-rickshaws or scooter cabs are allowed. There are 6,000 licensed rickshaws, the number being fixed at that, as early as in 1939 (the last new licence having been issued in 1944) and these are renewed every year. Many licences are held by policemen and also by top VIPs, including one by the Deputy Speaker of the West Bengal Assembly, who is the president of the oldest owners' union, the

*There was strong criticism from all quarters against the decision of destruction of the carriages; and later the government decided not to execute the decision.

All-Bengal Rickshaw Union. However, the total fleet of rickshaws actually in operation is far more, maybe ten times or more of the licensed figure. In fact, that number is anybody's guess and, in different estimations, varies widely between 24,000 and 70,000. All of them, however, carry numbers in the range of 1 to 6,000. The very situation of existence of such huge number of unlicensed vehicles leads one to think that either there is no management at all in the sphere, or that the police authority, which is in charge of the matter, is fatly rewarded for overlooking the unlicensed vehicles.

Be that as it may, the enormous number of these vehicles suggest that they contribute perceptibly to the city's transit needs. A recent estimate shows that they carry about 7 lakh passengers per week day, which is 10 per cent of the total transit trips (70 lakhs), and the number is equal with that carried by tram cars and only little less than that by State buses in the city.

The government's policy of excluding the unlicensed rickshaws, will wipe out a large slice—almost the whole of it, barring a little portion—and add remarkably to the existing scarcity of transport means in the city. The question is why this removal, after allowing them for long 40 years? If the government's reasons are that it is an inhuman trade and that it causes congestion on streets, then, why the few licensed ones are protected? If the reason is to bring about an end to the rampant black-marketing consequent upon their illegal existence, then why are they not being offered opportunity for having licences and are rather being ousted?

In fact, the existing ban on issue of further new licences to their trade, when there remains extensive demand for them, has made this a very fertile ground for bribe and corruption and, therefore, severe exploitation of the pullers. In any way, the reasoning is not convincing.

ABOUT 1 LAKH PULLERS

The approximate cost of a hand-rickshaw is Rs. 600 and one owner typically retains about Rs. 1,000 p.a. after licensing (or bribing) and maintenance expenditure. However, manufacture of hand-rickshaws is legally prohibited, the intention being, a licensed vehicle, when becomes too obsolete to be repaired, will not be replaced and the fleet will thus gradually die out. But in actuality this is not the case. As the unlicensed vehicles ply merrily, so also the trade in their manufacture and repair is carried on in large scales.

On an average, each puller earns, in a half-day shift, a gross income of Rs. 12-50, of which, the owner takes Rs. 2-00. The pullers are mostly from other states. They number around 1 lakh. They keep about one-third of their income for subsistence in Calcutta and the rest is posted

home to support dependents. Thus, these rickshaws constitute the source of livelihood for about half a million people.

And yet that cannot be a consideration for continuance of a mode in an urban area, particularly in a metropolis, if otherwise that is undesired. We feel that the question of continuance of rickshaws in the streets of Calcutta has to be viewed solely on its own merit as a transit mode—not as a matter of mercy to those who are employed. If for better civic life of millions of people living in and coming to the city, the mode should better be ousted, then on the ground of employment of some 1 lakh people, the interest of millions cannot be sacrificed. And the added unemployment caused by the decision should, in greater interest, be solved elsewhere in a suitable fashion.

THE CITY STRUCTURE

Calcutta is a primate city, being the centre of manufacturing, trade and commerce activities of the eastern India. The corporation area of the city comprises about 45 lakh people, as per 1981 Census, and a land area of 42 square miles, but the activity area of the city stretches far beyond that and is officially designed as the Calcutta Metropolitan District, which has a population of about 9 million.

The city is of elongated shape stretching north-south and longer distance movements extend north-south. Closer to the centre, however, east-west movements assume local importance, since the two major railway termina (the Howrah and Sealdah railway stations) lie respectively 2 km. west and 2 km. east of the CBD. The roads connecting them to it are extremely busy and worst traffic jams occur frequently in their vicinities.

The city has two distinct parts—the north and south of the CBD. The northern part is the older block—a totally unplanned growth, with densely situated buildings along narrow streets, frequent existence of very narrow and dark lanes and bye-lanes, quite long in distance and above all with a drainage system that has collapsed, mainly because of recent urban settlements on its eastern length. The southern part is, however, more planned with wider roadways and better drainage system.

POPULATION CHARACTERISTICS AND SOME TRANSIT NEEDS

The majority of the people belonging to the CMD area are of middle and low income groups with average monthly income of around Rs. 500, earning their bread by hard labour—either manual or clerical—and for that purpose most of them travel every day to the city-core as working people.

Private car ownership is low, there being 13 cars per 1000 inhabitants in the city, as against 50 cars per 1000 in Bangkok and 316 per 1000 in Washington, D.C.

Walking in the busy parts of the city is rather unpleasant, for climatic and other reasons, like narrow streets, crowded roadways, etc. Rickshaws constitute an informal and, therefore, a cheap mode and provide short trip journeys, particularly those of the nature of journey-at-will, and door-step needs.

Rickshaws are readily available near stations, hospitals, market centres and also along main roads. They move at a low speed—which is often barely, twice that of walking speed, and thanks to their easy manoeuvrability, they can ply on water-logged streets and penetrate even into the narrow lanes where other vehicles prove ineffective.

The patrons include shoppers visiting markets, businessmen carrying goods, salesmen accompanying samples, patients going to doctors and hospitals, women, old people, young children, guests in fine clothes attending social festives, and any one in hurry or laden or willing to enjoy a relaxed journey.

In a society where car ownership ranges around the meagre figure of 1.3 per cent of population, and where about 50 per cent of people earn a low income, such transit needs of specific nature can be met from the side of the demanders by some cheap means of publicly available private transportation, much cheaper than taxis, and rickshaws serve the purpose fruitfully.

It is in this background of city-structure, transit need situation and overall population characteristic that the importance of the mode is to be understood.

Be it noted that the unlicensed rickshaws in the city being about 80 to 90 per cent of the total fleet, the present policy of banning the unlicensed is tantamount to excluding the mode altogether from the city-life.

And the decision of retaining or ousting a mode is to be adjudged in the light of its social benefit-cost considerations, to which aspect, we may now turn our attention.

THE SOCIAL BENEFITS

The social benefits attributable to this mode are as follows:

1. It caters commuting need to about 7 lakh passengers per week-day, out of a total estimated demand of 70 lakhs. The above demand estimation is, however, supply-based, *i.e.*, how much demand is actually fulfilled by the available transit means, and the volume of unfulfilled demand can never be rightly ascertained.

2. The very structure of the city, particularly in its older part, *i.e.*, the north—gives rise to the existence of lanes and bye-lanes, quite long in distance, in each city-block and travel need through such pathways can hardly be met by motorised vehicles. Such city-structure essentially requires a mode of the type under reference, in order to meet travel needs through such lanes within and across the city blocks.
3. By virtue of its much cheaper fares than taxi cabs, for short trip journeys, it constitutes the most important type of mode required for meeting such journey needs, of private nature, for poor and middle income people who do not own a car or afford a taxi. In a city, in which such people far outnumber the better-off people, the necessity of having the mode also becomes much higher. The mode provides for travel facility connecting door-steps and through city streets where mass transit vehicles do not ply.
4. For the middle and low income people, for meeting the journey needs even along the major city streets for such reasons as carrying of children to schools, patients to hospitals, and old people and women from one place to another, this is the only available mode to rely upon.
5. The very busy and crowded city of Calcutta has been terribly groaning under the problem of acute scarcity of traffic means, and the mass transit modes, even in the corridors where they are available are most unsuitable for any journey, in which the commuter wishes to have some comfort, being relieved of the drudgery of suffocating pressure of co-passengers and constant rubbing of their sweated and evil-smelling limbs, while on the journey way. And where taxi is not affordable or available, which mode is to be looked after, but these hackney carriages?
6. During and after rains, when the streets of Calcutta in most parts become impregnable because of improper drainage, it is the saviour of thousands of commuters, reaching them safely, though lately, their destinations.
7. Their easy manoeuvrability enables them to move merrily through narrow lanes. On congested streets, when motorised vehicles stand static in long queues, they can easily divert pathway through a narrow lane or bye-lane and reach a point on the main corridor, avoiding the location of traffic jam. The commuter can be sure of reaching his destination, though late, even in a peak jam situation while other modes become helpless ciphers there.
8. The mode requires little capital and the per seat capital invested and recurring expenditure incurred for maintenance needs

herein are far less than those in any other mode. The skill required for construction, repair and driving of vehicles is very little and therefore it provides easy employment opportunity for the unskilled or semi-skilled poor and illiterate people.

9. Being manually driven, the mode does not consume fuel as its motive power, and in an age of severe oil scarcity, as in the present, this consideration makes it superior to many other modes, notwithstanding its far many disadvantages.
10. It has no polluting effect on air and atmosphere, as it occurs in the case of many other modes that use oil as driving power.

INHUMAN TOIL MORE SUPPOSED THAN REAL

The social benefits generated by the mode and enumerated above should be weighed against the drudgery associated therewith, *i.e.*, its social costs, which broadly speaking, comprise of the following elements:

The employment opportunity created by this mode is considered as being of a 'degraded' nature, some sort of inhuman trade. Cartoons of emaciated rickshaw-wallahs pulling fat men in fine clothes are used to illustrate social inequalities. If unemployment is preferred to the so-called degraded employment, then it involves a 'social disutility' and therefore, a social cost.

But two points are to be borne in mind in this connection. In the first place, the consideration of hand-rickshaw-pulling, being one in which one man carries others—as an 'inhuman trade' is more supposed than real. It is no more 'barbaric' than jobs of mining, loading/unloading, etc. Though seemingly, the driving of hand-rickshaws is more strenuous than cycle-rickshaws—and that perhaps because the latter are added with some mechanical advantages—yet, reports from Madras and elsewhere suggest that cycle rickshaw-pulling constitutes greater hazard to health and that the incidence of chest diseases, muscular strain and impotency is significantly high among rickshaw-cyclists than among hand-rickshaw-pullers. In fact, in the hand-rickshaws, the weight is mainly borne by the large size wheels and strain of the puller is much reduced.

Secondly, the poor-job situation in this mode is largely, if not wholly, an imposed one. The prohibition of cycle rickshaws and scooter-rickshaws within the area, accompanied with allowability of this mode, is responsible for the situation. If the improved design rickshaws were permitted, the position would certainly have been not so degraded.

CONGESTION ON STREETS

The second point, and the most powerful one in the aspect of social cost is the positive contribution to congestion and traffic jams that its movement brings about. The impact of congestion is far-reaching causing immense increase in the time-cost of travel, hampering smooth functioning of the activity network of an urban system. This is, in addition to the increased drudgery and hazards of delay in travel by commuters stranded in overcrowded vehicles. Further, patients hurrying to doctors, ambulance cars and fire brigade rushing to meet the emergency calls are all delayed en-route, owing to such jams, thereby causing immeasurable damage to life and property, for their inability to attend timely to such needs.

These are all various aspects of social cost connected with congestion. But congestion is not wholly caused by rickshaws alone, rather by many factors, such as narrowness of streets, widespread hawking business encroaching the pathways, tram movements on narrow streets, permissibility of *thelas* and disorderly and whimsical parking of vehicles alongside roads, etc. The contribution of rickshaws to this whole system would be only marginal. However, it is not denied that the existence of this mode accentuates the degree of congestion; and the social cost of the mode on this count should be considered in that light of its marginal effect in accentuating, rather than causing, congestion on streets.

BENEFITS OUT-WEIGH COSTS

On the whole, the point that emerges here is that the social benefits of the mode emanating from various counts, such as, catering to transit needs, especially of 'private' type and of journey-at-will nature in a city dominated by poor and middle class people who do not either own a car or afford a taxi frequently. These relieve the drudgery of travel on rainy days when traffic on many roads become immobile, meeting the travel needs through narrow lanes and bye-lanes in old unplanned city blocks where motor vehicles cannot penetrate. These add to the supply of travel mode by non-fuel means and thus doing positive help in days of oil crisis and also generate employment opportunities for a large number of unskilled people. All these factors should be weighed against the related social costs of the mode in the shape of creating degraded type of employment.

Obviously, the weight of benefits would far outbalance that of costs and therefore, the policy of abandonment of the mode from within the city-core, cannot be said to add to the social welfare.

NOT DISCARDED BY COMMUTERS

In fact, the expulsion of a particular travel mode from the civic life of an area is just and proper only when it occurs in the natural process of evolution and growth, *i.e.*, when it is not sufficiently patronised by commuters. That will be a situation in which the mode does not get enough customers and is automatically wiped out of the daily life of people, by virtue of simple laws of economics.

And that is not yet the case with the rickshaws in Calcutta. Unless the socio-economic and structural perspectives of the city become so changed that the people themselves discard a mode, it is doubtful, how far it would be judicious to eliminate one existing mode by simply an administrative decree, particularly in the face of tremendous gap in the overall supply of transit means of the city and the huge importance of the mode in question from various aspects.

Actually, in a highly populous city like Calcutta where space devoted for roadways is conspicuously low—being only 6 per cent of the total land area, as against 20 to 30 per cent in western cities—an easily manoeuvrable mode of the type of hand-rickshaws, now plying there, would be difficult to be replaced by any mode other than that of the similar type, maybe of improved design, such as cycle rickshaws or scooter rickshaws. But these latter two modes are not permitted within the 'city' by administrative decisions.

NATURAL EXCLUSION INVOLVES HUGE SOCIAL COST

The mode could be eliminated from serving any fruitful purpose of the city, particularly, in its old blocks, only by widening the narrow streets and lanes and making them broad enough as to ensure plying of motorised vehicles thereon. But that would require large scale demolition of buildings and human settlements and provision of such settlement elsewhere, preferably in the proximity. The last condition could hardly be satisfied. And yet the question remained, would the huge social cost involved in such restructuring of the city be economically justified, simply for the purpose of ousting this mode and thus relieving the city of the marginal discomfort added therewith? The answer would, in all probabilities, be in the negative.

Hence it follows that for the existing settlements, the mode should be allowed to continue and that too in sheer public interest. Not banning, but legalising the unlicensed rickshaws should be the appropriate government policy. For immediate improvement of the situation, administrative restrictions on its plying in some streets may be imposed and/or extended.

A TAX ON THE VEHICLE

And after such legalising, if a fee was suitably imposed for rickshaw, that would substantially add to the city coffer and pay for use of road-space by these vehicles. At present rickshaws pay a trifling road tax of Rs. 8 per annum. The tax could be enhanced and a sum of Rs. 50 per annum per rickshaw would not be too high. If, say, 40,000 rickshaws were legalised in the process (assuming that number as the mid-figure between the two extremes of estimated variations in the number of unlicensed rickshaws—24,000 and 70,000) then the annual tax of Rs. 50 per rickshaw would fetch a good sum of 20 lakhs per annum, which could be used for better implementation of traffic rules, etc., and thereby smoother flow of transit vehicles. Additionally, the rickshaws would enjoy a higher degree of legitimacy in the eye of the people too.

A NECESSARY EVIL

As long-term measures in these areas, thought should be directed to change over from the existing hand-rickshaw vehicles to some improved means. There have been attempts in various countries to add small engines to rickshaws driven by pedals, or to introduce scooter-cabs. Permissibility of some type of such modes should be given thought to for replacing the hand-rickshaws ultimately.

All in all, in keeping with the commuting needs of the existing city, at least for the old unplanned city-blocks, even in the long run, rickshaws of some type or other would continue to be an inevitable necessity—perhaps a necessary evil.

THE MODE IN THE NEWLY DEVELOPED AREAS

In the matter of future development and urbanisation programmes—say, in the case of further expansion of the city itself on new horizons—engineering and planning devices should be appropriately applied so as to eliminate the necessity of this type of mode for meeting journey needs of various nature. For example, the roads and streets should be sufficiently broadened there, with parking facilities extensively available and turning of vehicles here and there easily possible.

If that is done, then from the technical standpoint of manoeuvrability, the necessity for supply of this type of informal mode would be non-existent. But even then, the point remains that the availability of road space for plying motorised vehicles—cars or taxis—is not the only and sufficient condition for offering such modes as the exclusive means for satisfying some transit needs of specific nature for the people of a particular area. There is the aspect of 'ability' on the parts of commuters

too. Unless, in the areas so planned and scientifically arranged afresh, with enough wide road spaces, the human settlement as a whole—*i.e.*, most of the inhabitants belonging therein, if not each and everyone of them, and not simply a few or even the majority—is economically placed so high as to be able to own a car or afford a taxi-cab very frequently, the transit needs of journey-at-will shall persist on having some cheap informal modes there, however improved there design may be. And that again for meeting the sheer necessity of the economically rather weaker section of the people, the well-being and fulfilment of interest of which section counts most in any consideration of welfare of a society. □

Air and Water Pollution Control in the Calcutta Metropolitan District: Issues of Tasks and Organisation

P.K. SAHA

THE ONLY redeeming feature in an otherwise bleak situation of the Calcutta Metropolitan Districts' (CMD) water and air pollution scenario is the volume of data that were routinely collected and analysed by the Calcutta Zonal Laboratory of National Environmental Engineering Research Institute (NEERI) over almost a decade. Since their basic mandate in the water pollution front was the water quality study of the Hooghly estuary, bulk of such data deal with the pollution load on the sink through the outfalls on either banks of the river together with their seasonal and annual changes. However, a 24 hours' in-plant survey of twenty two industries along the river bank was also done, based on composite sampling which, at least, gave time specific indications of the extents of bacteriological, chemical and toxic pollutants contributed to the river by this selected group of industries. Subsequent follow-up studies concentrated on specific locations of importance to the existing and proposed water supply systems.

The Air pollution survey, limited in scope to the cities of Calcutta and Howrah collected data on the atmospheric pollution of the twin cities from twenty five sampling stations in different types of localities. Besides emission inventories were prepared for industrial and other sources including domestic chullas and the mobile ones like cars, buses and lorries.

The findings of these surveys have already been reported in the columns of the *Statesman* and seem to have a sobering effect on those who care. To recapitulate some pertinent data in brief, the total volume of domestic waste water reaching the river daily in its nearly 100 km. stretch between Kalyani and Birlapur was about 2 lakhs cubic metres. Compared to the Indian standards specifications for effluents that may be discharged into the inland surface waters almost all these waters exceed the limit of suspended solids (30 mg/litre) and fortyone outfalls

on the left bank and sixty five on the right bank, a total of 106 out of 142, exceed the limit of Biochemical Oxygen Demand (BOD) of 20 mg/litre (These two are among the important physical indicators of water pollution). The bacterial loads, predominantly of fecal origin, were also much in excess of the ISI ceiling for bathing water all over the length.

The industries' survey results show discharge of BOD much in excess of the ISI limit from units producing papers and pulp, rayon textiles and leather products. Many of these units and others with metal products discharge heavy loads of toxic chemicals like lead, arsenic, chromium, etc., as well.

In polluting the air over the twin cities 256 major industries together with domestic fuel burning and transportation exhaust contribute a total of over 670 tonnes of pollutants per day including particulates, carbon mono-oxides, hydrocarbons and others. Average particulate values were found in the range of 400-600 micro-grammes/m³ compared to 150 in case of a reasonably clean atmosphere with other pollutants often far exceeding their tolerable limits under specific conditions and on localised basis.

But such statistics by themselves offer no solution to the problems. Control of pollution resulting in improvement of environmental conditions depend on specifics of pollutant discharges and treatments thereof. As Sam Goldwyn would have put it, the 'strongest weak point' here is that no universal panacea exists for the pollution problem currently being faced by the CMD or for that matter by any other metropolitan areas of the developing world.

Industries in the CMD produce a significant amount of pollutants which the NEERI survey has identified locationwise in terms of quality and quantity for a specific period. But public proclamations to the contrary, 'cheap adequate' solutions to such pollutions is a myth. Effluents from the present day high technology industries are, in general, not amenable to low technology solutions especially in view of the limitations of space and locational disadvantages; most of the industries in the CMD being in areas highly built-up. Adoption of expensive solutions is thus mostly the way out. In many cases, even such solutions will have to be evolved through long and costly research and pilot studies as no 'off the shelf' solution would serve the purpose. On the other hand, industries being much in demand in all parts of the country, industrialists have strong clouts. In the late sixties one of the most polluting industries in Asansol frustrated all attempts by local authorities for it to see reason simply by threatening to move out to the adjoining State.

But the crux will come with the pollution from domestic sources. What the NEERI survey covered here is only the tip of the iceberg. Being deltaic in formation the land in the CMD predominantly slopes away from the river. This is also clear from the volume of domestic

effluent recorded by NEERI, namely, 2 lakh cubic metres a day which is a tiny fraction of the total domestic water used in the CMD. Much of the dark, frothing and sluggishly flowing liquids so common in the surface drains of the CMD flow away from the river and end in the nearby low-lying areas or stay close to the sources as real threats to health. Any success in taking care of these will automatically improve the polluted river and the inland water channels. And such a step in turn will depend upon taking care of the individual domestic sources of pollution, *e.g.*, the toilet, the kitchen and the baths. Khatala are, of course, another major problem but the solution to that may not be intractable once domestic pollution could be seen reduced. The key to water pollution control in the CMD, truly enough, lies with the improvement of inhouse sanitation.

Individual's sanitary practices depend on socio-cultural norms as well as on economic levels. In the CMD such practices vary from the 'bush' to the luxurious comode with flushed low-down cistern, of matching shades. Modern sanitary practices, namely, the sewerage, which grow in the cities of the west historically, is more oriented towards convenience than on cost effectiveness. By any reckoning these are expensive for our cities not only to build but also to maintain. Even building such a system is not the end in itself and the local sanitation will improve only when individual houses get connected to the sewers which are expensive by themselves. Lot of the people cannot afford such connections moneywise; others do not care as basically we are not sanitation conscious. There is still a third and major group who do not have houses to connect to. Besides sewerage needs good supply of water preferably inhouse to run the sewers. In combination of all these factors, Howrah sewerage system with its expensive treatment plant runs almost dry while the city drains overflow with filth. Moreover, sewerage system only remove the waste product of the society from its immediate environ and the treatment techniques while reduce the suspended solids and the BOD are not efficient at removing pathogens which should be of more concern in any pollution abatement programme for the CMD. As a recent World Bank publication aptly puts it "(The Sewerage System) is not especially clever, nor logical, nor completely effective and it is not necessarily what would be done if the same countries, had the chance to start again".

Appropriate sanitation technologies much talked of these days are really the age-old systems in new garbs. Provided these could be made socially acceptable through extensive salesmanship, being less expensive, they will cover the sanitary needs of those who want sanitation but cannot afford a conventional one. But these are at best sub-optimal solutions since these, in general, handle the toilet water only with wastes from kitchen and baths flowing into the surface drains, maintaining the

flow of hazardous liquids albeit in slightly less quantities, with slower rate of BOD demand and also less pathogens. The physical environment, however, will continue to be visibly revolting and hygienically unsafe.

NEERI's air pollution survey data show that apart from the industries, motor vehicles and domestic 'chullah' are the major polluters. Here, technological solution, namely, better maintenance of engines for motor vehicles and use of non-smoking coals and gas are available. The former can also be enforced if the authorities are really keen. But how does one introduce low carbonised non-smoking coal to a subsistence level family not to speak of LPG or piped gas? Subsidy in fuel cost does not hold much hope as the fuel presently used are invariably picked up free. Free supply of fuel is rather likely to end up elsewhere in return for a few coins to enrich the meal. Prevalent firing techniques of coal 'chullahs' through use of cowdung cake or wood also produce a lot of smoke and better methods are available. Unfortunately, any technological improvement towards reduction of pollution make the system more expensive and coupled with our basic indifference to pollution do not find acceptance even at income levels where these could be afforded.

As pointed out in the above discussions any attempt at controlling pollution will face barriers at technological, economical and socio-cultural levels.

For providing engineering solutions, which are nowhere in sight, even such essential prerequisites as base maps are not there for the CMD to indicate the locations of roads and drains and areas under different uses correctly enough on which any proposal could be formulated and tested for its cost. The bulk of such cost figures being thrown around these days are really not much better than guesses. The environmental plight of the estuarine Hooghly basin is often compared to those of the Ohio basin of the USA and the Ruhr in Germany. The levels of pollutions of these two basins were much more intense and primarily industrial which are necessitated very high technology solutions as well as evolutions of computerised monitoring and control systems many of which had their first use in these basins. Pitted against these problems were a relatively affluent clientele with high degree of environmental consciousness. Image building for the industrialists was also a basic motive. Neither of these apply to the CMD situation. Nor also the level of the present pollution of the estuary proper is in anyway comparable to the degradation that the Ohio River and the Ruhr River had to cope with. But the problem here is in another sense more intractable springing from the basic conflict between the society's priorities as seen at the individual's level and the attempt of looking at sanitation in terms of the established mores of the modern world, while chasing technologically appropriate solutions which are simply not there.

Organisational tasks for an authority in charge of environmental improvements in the CMD, even in the limited sense of controlling air and water pollution, is thus bound to cover a very wide spectrum. It will have to collect, handle and treat domestic waste, starting from the scratch in many cases, undoing the wrongs already done, for which existing technical solutions are either expensive or inadequate and in many instances non-existent. It will have to coax the recalcitrant industries to see reason and to introduce treatment of their effluents, may be in agreed steps. And in both cases, it has to evolve financial and social incentives to sugar-coat the financial implications. Besides there will be the tasks of maintenance and operation of the domestic systems in the organisational vacuum that now exists at the local levels, monitoring and control of the total system and lastly, the most important one of changing the social perspective of individual sanitary habits in favour of overall environmental improvement rather than of personal hygiene only. All in all this sets out as hard, complex and multifaceted set of tasks as could be imagined. Presently, in the CMD sanitation programmes at local levels are planned, implemented and handled by the Calcutta Metropolitan Development Authority or one or more of its associate bodies, control of basin pollution is in the hands of the State Board for Water Pollution (Prevention and Control).

All these organisations are essentially two-tier ones. The decision making tier is a board consisting of bureaucrats representing the interest of the government and politicians representing other local interests together with, sometimes, a sprinkling of experts between them. Such organisation follows the prevailing formula adopted in most development organisations at the state, metropolitan or local levels in India and there will be a strong tendency to duplicate the same, in case of a pollution control organisation for the Calcutta Metropolitan District. Such straight-way representation of interest at the policy making level in the board is, however, complicated by the fact that the decision making level of such boards often rests with the minister either formally or informally, who will claim to represent the often conflicting interests of the people and the government dominate the apparatus. The second tier, *i.e.*, operational level is primarily dominated by engineers steeped in the culture of construction. The perceived need to have social scientists have of course resulted in the induction of experts from such fields too. Since they traditionally come from a totally different culture and orientation, mostly these two groups operate in a 'we-they' situation with mutual distrust, often verging on antagonism. As a result, such organisations have become either primarily construction oriented or research oriented with no sign of one reinforcing the other towards a common goal. A more ill-fitted operational level than either of these types cannot be envisaged for the operational tasks of pollution control in the CMD.

The policy making level of such an organisation, to survive and grow, must exist in harmony with the needs of the task environment. But the harmony in practice consist of the subjective reflexes of the composition of the organisation. Thus, to an organisation composed primarily of bureaucrats 'needs of the environment' will essentially be the needs of the government departments they are seconded from, while a totally political organisation will see the needs of the environment as synonymous with their immediate political needs. But since both are the facts of life in a democratic society an organisation can succeed only to the extent that it could symbiosise these two views with the goals and objectives of the organisation. The trauma of the metropolitan level authorities in India today basically stems from their failure to solve this problem of an optimal mix between the bureaucrats and the politicians in any organisation both in the formal and the informal power structure.

Existing organisational set-ups at metropolitan levels in India do not present much of a success story even in terms of their limited tasks of primarily PWD type activities. As Abhijit Datta and Bappaditya Chakravarty conclude in their book, *Organizing Metropolitan Development* such organisations embody 'autonomies' from the local political influences considering a particular local function too important to be left to the whims of local politicians and the vicissitudes of local party politics. What is not realised is that the very justification of public institutions is their political sanction and depoliticization of a special local function really means shifting the arena of politics upwards to the state level where it is irrelevant. In the process such authorities adopt a defensive posture and functions as protege of their patron department. A not too bright prospect for an organisation with such a complicated array of social and technical tasks as involved in the control of air and water pollution in the CMD! □

*The Indigenisation of Management Education at the Local Level in Nigeria**

DELE OLOWU

THE AIM of this paper is to describe the role of the Nigerian federal government in promoting and indigenising training for local government officials throughout Nigeria. Given the critical nature of skilled personnel for the success of any organisation, the paper begins by highlighting the problems encountering Nigerian local governments in recruiting or retaining an adequate number of qualified staff before the 1976 nationwide reform of local government. It also discusses and assesses the federal government's strategies and attempts to provide an up-to-date information on the present state of local government personnel needs.

PERSONNEL MANAGEMENT PROBLEMS CONFRONTING NIGERIAN LOCAL GOVERNMENTS BEFORE THE 1976 REFORM

Local governments suffer from the same problems as other public service organisations, the conflict between efficient services—production and political leadership and supremacy, between professional management and the submission of the latter to the policy leadership of amateur politicians. In addition, local governments, the world over, often suffer from their relatively inferior positions in terms of image and resources—compared with public service organisations at the higher levels (federal and state). Furthermore in a developing economy, whose hallmark is often the scarcity of skilled personnel in all fields of endeavour, local governments, which offers the least career prospects, other attractions often becomes a dumping ground for those who failed to make it in the private and other public sectors.

The interaction of all three factors made it nearly impossible for Nigerian local governments to make an impact on the management of

*The paper was originally presented at the National Conference of the Nigerian Association of Schools of Management Education and Training, March 1982.

several services for which they were responsible. The Public Service Review Commission of 1972-74 ran a catalogue of these problems.¹

- (a) Higher salaries paid by state, federal and private sectors.
- (b) Lack of promotion prospects at the local level.
- (c) Poor conditions of service at the local level.
- (d) Tendency of states to 'take over' certain functions, transfer qualified staff to Government and leave unqualified and untrainable staff at the local level.
- (e) The requirement that many local government authorities second qualified staff to other levels (for example Area Development Boards) while still being responsible for their salary.
- (f) The generally poor image of the local government authority as a place to work of view of the continual transfer of functions to Government, Area Development Boards, etc.
- (g) The unwillingness of trained staff to serve in rural areas and the apparent ease with which employees seem to be able to have postings changed.
- (h) The lack of any apparent logic in the classification and grading of positions.
- (i) The poor financial condition of local government authorities brought about on the one hand by Government take-over of certain revenue sources and on the other, by the inability of the local government authority to develop other sources and improve the existing ones; thus preventing them from recruiting and retaining qualified staff.

These problems I have elsewhere² categorised into three:

- (a) the traditional image of local government as the haven of local 'boys' those who could not make it elsewhere, as the preserve of traditional institutions and their kith and kins and of local politicians;
- (b) technical problems relating to the lack of data (also resulting from lack of skilled staff to undertake them), the scare of rural areas, where most of the people live, for local officials, and
- (c) the political problem which accords the least status to local governments and their officials and denigrates them to mere

¹Public Service Review Commission, *Report of the Taskforce on Local Government*, Lagos, mimeo, 1973.

²Dele Olowu, *Personnel Management and Effective Local Government System in Nigeria*. Paper delivered at Conference of Chairmen of Local Government Commissions in Nine States, Akure, January 1982.

pawns in the political chess among state officials and politicians.

Since the 1976 nationwide reform³ was aimed at qualitatively improving the image and constitutional status of the local governments, the federal government embarked on a number of strategies to counter this parlous situation.

1. As a result of the Public Service Review Commission Report of 1974, it got the states (rather an easy thing under a military government) to harmonise working conditions in local government with those existing in the rest of the nation's public services. In addition, each state was mandated to set up a Local Government Service Commission, in close parallel to the Federal and State Civil Services Commissions to standardise personnel practices on a statewide basis.
2. It encouraged the states to second and transfer staff permanently to the local governments in order to enable the newly created 299 local governments (1976) to take off.
3. Immediately after setting up new local governments, the federal government ran countrywide advertisements to educate the public on the improved service conditions at the local government level.
4. It initiated a nationwide pension scheme for all local government officials.
5. Finally, as a follow-up to the 1976 Reform, and in order to permanently tackle the problem of dearth of personnel at local government level, the federal government set up a Committee on Local Government Training to examine the long-term personnel needs of the local governments. The rest of this essay is an assessment of the Committee's recommendations and of government attempts to implement these recommendations.

THE COMMITTEE ON LOCAL GOVERNMENT TRAINING

Of all the measures enumerated above, only training can ensure the regular supply of qualified staff to local governments in the long-run. Seconded staff often returned to their State Civil Services. Local Government Service Commissions and even local government structures may be politicised (as they presently are) and therefore make local governments loose attractions for newly qualified staff. However, a staff once trained

³The 1976 reform was the first and most comprehensive global review of local government structures in Nigeria. For details, see Federal Republic of Nigeria, *Guidelines for Local Government Reform in Nigeria*, Kaduna, Government Printer, 1976.

in local government matters feels some loyalty to the local government as an organisation as a result of this specialised training. Even if conditions outside the local governments were much more auspicious politically and economically, only continuous training can offer regular supply of staff for more senior positions and misuse against wastage through retirements and redundancy. Besides, only through regular training can local government staff keep abreast of the most recent developments in the management of local services (*e.g.*, basic health care, self-help housing and rehabilitation etc.), local finance and constitutional and political developments relating to local governments.

Training for local government staff had hitherto been haphazard and uncoordinated. Most of the training programmes were mainly for junior and middle-level manpower. Most senior management training were undertaken abroad especially in Pittsburgh, Birmingham and Cambridge. The highest indigenous course in local governments was the Higher Diploma in Local Government which was offered by both Institute of Administration in Zaria and Ife. The Management Institute at Enugu also made some contributions to local government training before the outbreak of the Civil war in 1967. However, this was a course designed for executive officers who have risen through the ranks without any formal training.

The establishment of the Committee on Local Government Training was therefore a bold attempt towards evolving a comprehensive training policy at the local government level. The Committee itself was set up by the meeting of permanent secretaries of local government (with the Permanent Secretary, political division of the cabinet office presiding). The Committee comprised mostly university academics whose field were in management training, but was headed by a seasoned administrator, Dr. G.O. Orewa, who until his voluntary retirement in 1979, was for long the permanent secretary, local government matters in Bendel State. The Committee was inaugurated on 23rd February, 1978 and submitted its report in November, 1978.

The report recognised the crash-training programmes that were being organised by the Universities of Zaria and Ife for top executives of the new local councils as merely palliative. It called for an attempt to tackle training on 'comprehensive and permanent bases' in order 'to produce and retain the calibre of staff, both in number and quality, needed for efficient services' in the nation's local governments.⁴

The report identified the range of local government professional needs in the following areas (Table 1) and grouped them into four

⁴*Report of the Committee on Local Government Training*, Lagos, Cabinet Office, November, 1978, also referred to as 'Orewa Committee' after its chairman.

TABLE IA CLASSIFICATION OF LOCAL GOVERNMENT STAFF REQUIREMENTS

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- I Administration, management etc.
 - II Accounting, revenue collection etc.
 - III Clerical and secretarial duties
 - IV Agriculture, animal health and forestry
 - V Health: preventive, curative including leprosaria
 - VI Education (primary, nursery and adult)
 - VII Works
 - (a) related to buildings
 - (b) related to roads and minor civil engineering operations, mechanical and electrical services including drains, irrigation, land reclamation; survey, estate management, valuation, town planning
 - VIII Store keeping
 - IX Water supply
 - X Information services
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SOURCE: *Report of the Committee on Local Government Training*, November, 1978.

NOTE: This list of requirement was based on the services responsibilities accorded to local governments under the 1976 Reform. All of these provisions were enshrined in the 1979 Constitution (See Table IB).

TABLE IB FUNCTIONS OF NIGERIAN LOCAL GOVERNMENT UNDER THE CONSTITUTION (1979)

A. *Mandatory Local Government Functions*

1. Collection of rates (including tenement rates) radio, television and non-mechanically propelled vehicle licences.
2. Establishment and maintenance of cemeteries, burial grounds, homes for destitutes and Infirm, market, motor-parks, public conveniences, roads, drains and recreation facilities (including playgrounds and parks).
3. Control and regulation of outdoor advertising and hoardings, pets, shops, kiosks, restuarants and laundries.
4. Registration of all births, deaths and marriages.

B. *Functions in which Local Government are to participate*

1. State Economic Planning and Development.
2. Provision and maintenance of primary education services.
3. Development of agriculture and natural resources (other than the exploitation of minerals).
4. Provision and maintenance of health services.

C. *General*

Any other functions that may be conferred by the State Assembly.

SOURCE: Federal Republic of Nigeria, *The Constitution of the Federal Republic of Nigeria*, (1979) Fourth Schedule.

classes:

- (a) Professional/Administrative.
- (b) Sub-professional/Supervisory
- (c) Rotive operatives at more highly skilled level.
- (d) Lesser skilled operatives.

The range of courses proposed for all four groups can be broadly classified into 'Professional' and 'Clerical/Executive/Administrative' courses and are summarised as much as possible from the report in Tables 2 and 3 respectively.

In addition, the Committee had suggested the establishment of national training centre, to handle most training at the senior levels as well as serve as centre for training trainers at the local levels and for shorter courses. Nevertheless, the federal government came up with its own formula of establishing three national centres of local government training attached to the Universities of Ahmadu Bello, Ife and Nsukka with their surrounding states serving as catchment areas (Table 4). It proposed a three-tiered training structure in which the federal, state and local governments will handle senior management, middle and lower-level training respectively. For the senior management course, the federal government proposed two national diplomas. The first, the Nigerian National Diploma (NND) on Local Government Administration and Management should be a two-year diploma for those who are supposed to have completed the stage 1 Certificate Course in Local Government which is awarded by the state's Local Government or Civil Service Training Schools. In the alternative, intending candidates should be on Senior executive grades (levels 06 or 07) who could then serve as Deputy or Assistant Heads of Departments (especially as Assistant Secretaries and Treasurers). The second course, the Advanced Diploma in Local Government (equivalent to the Postgraduate Diploma in Public Administration course) was to serve as the terminal degree for prospective heads of departments in the local governments. These two courses (See Table 5) were funded directly by the Federal Government and since their inception in 1979 a total of 5.2 million has been allocated by the federal government to the three institutions.

ASSESSMENT OF LOCAL GOVERNMENT TRAINING TODAY

Without doubt, the federal government has succeeded through its post-1976 policy on local government training in streamlining training at that level. It has also successfully indigenised local government training, and this rightly so as few training on local government can succeed outside the political context in which it is to be applied. Furthermore,

TABLE 2 SUMMARY OF TRAINING LEVELS FOR STATE GOVERNMENT BY THE OREWA COMMITTEE:
CLERICAL/EXECUTIVE/ADMINISTRATIVE COURSES

<i>Course</i>	<i>Qualification for Admission</i>	<i>Proposed Status of Graduates</i>	<i>Duration</i>	<i>Remarks</i>
Clerical Asst. Course	Primary 6/7	Clerical Assistant	18-12 months	Mainly intensive Remedial English and Arithmetic.
Clerical Asst. Course	Secondary 3 or S. 75	Clerical Assistant	6 months or 8 or 7 months	Promotion to higher grade does not depend on the completion of the course
Clerical Course (Induction Course)	School Cert. holder	Clerical Officer	6 months	
Stage II Clerical Officer Course	School Cert. holder (who have completed the Induction course or Clerical Assistant Paper to the Clerical Officer).	Snr. Clerical Officer of Chief Clerical	2-5 months	Specialised Course.
National Diploma Stage I Course	Stage 2 Clerical Officer graduate and Clerical Officer who has successfully completed 6 weeks Orientation Course.	06-07 (A.E.O.s-A.E.Os, etc),	One Academic year	Specialised Course

National Diploma Stage 2 Course: Specialised courses either Local Govt. Finance & Account- ing or Local Govt.	Those who have satisfied State I conditions.	NND (LGAM) Nigerian National Diploma: Local Govt. Admin. and Mngt. of NND, LGFA; Nigerian National Diploma (Local	2 years
Administration and Management		Govt. Finance & Accounting) Level 08 (Deputy or Asst. Treasurers or Asst. Secretaries).	
Local Govt. Finance and Accounting or Administration and Management	NND in Local Govt. or Univer- sity graduates who have been in Local Govt. Service for at least one year.	Certificate to be awarded on graduation is DPA. (General Admin., Heads of Depts.)	1 year

TABLE 3 SUMMARY OF TRAINING LEVELS FOR STATE GOVERNMENT BY THE OREWA COMMITTEE:
PROFESSIONAL COURSES

<i>Course</i>	<i>Qualification for Admission</i>	<i>Proposed Status of Graduates</i>	<i>Duration</i>	<i>Remarks</i>
Course for Snr. Professional/Technical Staff	Snr. Manager in depts. e.g., Engineers, Doctors, Surveyors, etc.	Remain the same	2-4 Weeks	Promotion to higher grade does not depend on the completion of the course.
Artisans and Technicians	Primary 6	Technician or Artisans	18 months	
Training of Town Planning		Town Planning Assistant	1 year	
Training of Survey Assistant		Survey Assistant	6-9 months	
Training of draughtsmen		Draughtsmen	9 months	
Tax Clerks course		Tax Clerk	6 months	
Snr. Tax Clerks Course		Senior Tax Clerk or Assessment Officers	3 months	
Property Evaluation Course	People that have some practical experience	Property Evaluation Officer	6 months	
Store Asst. Course		Store Assistant	5-6 months	
Store Keeper	Experienced Store Assistant Secondary School Leaver	Store Keeper	3-4 months	

TABLE 4 UPPER AND MIDDLE LEVEL ADMINISTRATIVE TRAINING IN THREE NATIONAL CENTRES (1978-81)*

<i>Centre</i>	<i>Catchment States</i>		1979/ 80	1980/ 81	1981/ 82	Total Gradu- ates
University of Ife, Ile-Ife	Bendel, Kwara, Lagos	ADLG	20	18	14	52
	Ogun, Ondo, Oyo (90)	DLG	—	79	69	148
University of Nigeria, Nsukka	Anambra, Benue	ADLG	10	7	16	633
	Cross-River, Imo					
	Rivers (84)	DLG		63	85	148
Ahmadu Bello University, Zaria	Bauchi, Borno, Gongola	ADLG	34	23	12	69
	Kaduna, Kano, Niger	DLG	—	74	86	160
	Plateau and Sokoto (127)					

*Graduates or intending graduates for 1981/82 Session only.

Total number of local governments (by 1979) are shown in parentheses.

TABLE 5 LOCAL GOVERNMENT TRAINING LEADER TO CLERICAL/ ADMINISTRATIVE/FINANCIAL STATE. (AS PROPOSED BY THE FEDERAL GOVERNMENT)

<i>Level</i>	<i>Certificate/Diploma</i>	<i>Awarding Institution</i>	<i>Governmental Responsibility</i>
Stage I	Certificate In Local Government	Local Government Training School	State
Stage II	Diploma In Local Government	Universities of Ife, Nsukka & Zaria	Federal
Stage III	Higher Diploma in Local Government	Universities of Ife & Zaria (being phased out)	State
Stage IV	Advanced Diploma in Local Government	Universities of Ife, Nsukka, Zaria	Federal

it has also succeeded in picking the right training strategy—training in university departments with high reputation for local government matters. Each of the university departments concerned have succeeded in recruiting more personnel for training, mostly from amongst retired state and local officials as well as from among university academics. This is important, as the only alternative to this is on-the-job training which is reputed to be the most effective form of training.⁵ Nevertheless, as the Orewa Committee's report pointed out, there is often on one to

⁵United Nations, *Local Government Training*, New York, Department of Economic and Social Affairs, New York, 1968, p. 10.

impart such training at the local government level. Moreover, each of the three centres has produced a report on the performance of the local governments in its catchment area.⁶

Finally, the federal government's training programme has succeeded in producing a large number of highly qualified administrators and financial experts for the local government since its inception in 1979. This has clearly boosted the morale and the performance capacity of local governments. It is, therefore, not surprising that the status and quality of officials at the local government level increased up to about 1980. The influx of fresh university and secondary school graduates would perhaps have been higher if the state governments (in response to the pressures from the National Union of Local Government Employees (NULGE) had not made it impossible for such categories of students to be considered for admission.

On the other hand, there are still very serious defects with local government training throughout the country. Space does not permit an exhaustive treatment of these issues. They would merely be listed and briefly commented upon.

Firstly, improvement in local government personnel is heavily dependent on close collaboration between the three levels of government, given the present allocation of responsibilities for local government training and the interlocking responsibilities by the federal and state governments for local governments under the 1979 Constitution.⁷

However, the present situation whereby states create so many more local government units mainly due to political considerations rather than to the consideration of personnel availability nor functional viability is counterproductive on the training efforts of the federal government (see Tables 6 and 7).

Secondly, the commitment of the federal government to higher level training without a corresponding response by several state governments for training the middle-level/technical manpower leaves much to be desired. For local government, the availability of qualified tax clerks, property evaluation, survey assistants, town planners, store keepers and Clerical Officers is a *sine-qua non* for effective performance at that level.

⁶For the University of Ife report see, L. Adamolekun, O. Osemwota and Dele Olowu, *Report on the Performance of Local Governments in Bendel, Kwara, Lagos, Ogun, Ondo, and Oyo States, 1976-80*, Ile-Ife, 1980.

⁷Whereas, the National Assembly provides the major revenue sources of Nigerian local governments, the state governments (through the State Assemblies) possess the instruments of executive power over the local governments. Some observers interpret this to mean a 'checks and balance' system which will guarantee the existence of democratic local governments as envisaged under the 1979 constitution. See Federal Republic of Nigeria, *The Constitution*, Lagos, Government Printer, 1979.

TABLE 6 CREATION OF MORE LOCAL GOVERNMENTS: SITUATION REPORT DECEMBER, 1981

<i>State</i>	<i>Populations as of 1976</i>	<i>No. as of October 1979</i>	<i>New Local* Governments</i>	<i>Total (1981)</i>	<i>Percentage Increase</i>
Anambra	3,596,618	23	41	54	134.8
Bauchi	2,431,296	16	27	43	168.8
Bendel	2,460,952	19	41	60	215.8
Benue	2,427,017	13	20	34	161.5
Borno	2,997,017	18	34	52	188.9
Cross River	3,478,131	17	30	47	176.5
Gongola	2,605,263	17	40	57	235.3
Imo	3,672,654	21	29	50	138.1
Kaduna	4,098,306	14	40	54	283.7
Kano	5,774,840	20	9	29	45
Kwara	1,714,485	12	12	24	100
Lagos	1,443,568	8	15	23	187.5
Niger	1,194,508	9	9	18	100
Ogun	1,550,966	10	20	30	200
Ondo	2,729,690	17	33	50	194.0
Oyo	5,208,884	24	30	54	125
Plateau	2,026,657	14	7	21	50
Rivers	1,719,925	10	—	10	—
Sokoto	4,538,787	19	13	32	68.4
TOTAL	55,669,564	301	441	741	146.5

*Includes those being proposed by the legislative houses.

Of course, this is not to deny the effort of some state governments, such as, Lagos and Bendel, which have already established training schools for training Clerical/Assistant Executive grades and the efforts of the several schools of health technology, mid-wifery and community workers. Nevertheless, the incidence of regular massive training of such grades of officers for the local government is still very highly restricted. Even in those few States, local government training matters, their staffing, space allocation and programmes and management are often heavily subordinated to state government control and priorities.⁸ Certainly, the

⁸ The Chairmen of Local Government Service Commissions/Boards throughout the federation have advanced arguments for the insertion of the Local Government Service Commission in the Constitution (similar to its Federal and State counterparts) and the charging of such Commissions with all training matters. Under such an arrangement, there will be an Advisory Committee on Staff Training comprising the Commission, the Ministry of Local Government and the Local Governments. Local Governments normally contribute one per cent of their statutory allocation to Local Governments Training Fund at the state level.

TABLE 7A STAFFING SITUATION IN SOME SELECTED PROFESSIONAL CADRES OF THE OYO STATE GOVERNMENT UNDER THE 24 LOCAL GOVERNMENT STRUCTURE 1981*

<i>Professional Type</i>	<i>Approved Establishment</i>	<i>Nos. of Post</i>	<i>Vacancies</i>
Engineers	5	1	4
Medical doctors	6	3	3
Legal secretary	3	1	2
Estate and valuation office	6	1	5
Midwife/community nurse	291	179	113

*As at 30th March 1981. The number of local governments has since increased to 54. Even the Oyo State is more fortunate than many other States.

TABLE 7B STAFFING SITUATION IN ILESA LOCAL GOVERNMENT, 1976-81 (SENIOR MANAGEMENT POSTS ONLY)

<i>Financial Year</i>	<i>Establishment</i>	<i>Actual</i>	<i>Percentage</i>
1976-77	25	6	24
1977-78	32	11	34
1978-79	37	14	38
1979-80	44	19	43
1980-81	50	22	44

SOURCE: Dayo Ayinla, "Staff Management In Ilesa Local Government", D.P.A. Dissertation, (1981).

polytechnics and technical colleges can be much more utilised to advantage by state and local governments for training purposes.

Finally, although an attempt is being made to convert the different units handling the federal government training into university departments, the problems that the different units have experienced amidst normal Nigerian university politics and highly structured academic regulations of such universities makes one wonder whether this is really the best option.

Perhaps, now that a number of skilled personnel in local government training have been identified at the national level, and some form of infrastructures has been established in the three university training centres, thought could be given again to the idea of a national centre on

local government training, similar to the Brazilian Institute of Municipal Administration and the Institute of Local Government Studies in Britain which would have training wings in the present universities. It is probable that such an institution will provide a framework for federal government involvement in the training of other essential middle-level manpower for the local governments. Such a centre will also serve as a focus for the nation's training and research activities on local government matters. □

Water Pricing: With Reference to the Calcutta Metropolitan District: A Rejoinder

T.K. BANERJEE

P K. CHATTERJEE and A.K. Dutta in their article "Water Pricing: with Reference to the Calcutta Metropolitan District", in *Nagarlok* (Vol. XIV, No. 1, January-March, 1982) have addressed themselves to the very important task of indicating the right approach in formulating pricing policy for a vital municipal service, like, water supply. While this attempt is commendable, the contents of the article is intriguing on various counts.

At the very outset, the authors make a very bold statement, perhaps without knowing that they themselves would contradict it later. They say:

There is a strong feeling among many that water supply in urban and rural areas should be free of cost and that it is not proper to charge the consumers. They argue that water being a vital element cannot be priced. Taxing water will only create additional burden to poor people and will result in misery. They further say that water is a God gifted natural resource—it cannot be sold by Government or the municipal bodies.

Having made this statement the authors give the following narration:

At present, within the Calcutta Metropolitan District (CMD), municipal or corporation authorities partially charge water at a fixed nominal rate, some name it as a portion of municipal tax as water rate.

This narration contradicts the above statement. If municipal water supply was taken as "God gifted natural resource" the architects of age old municipal acts of the State, the "politicians, administrators and

engineers", and above all the municipal functionaries and tax payers would not have perhaps allowed legislative measures for 'charge' or 'tax' for consumption of piped water. It seems that in a zealous attempt to establish that supply of water through a municipal water supply system is not a cost-free commodity or service, the authors have found it convenient to start with the 'God gifted'—story to build up their arguments against it.

Para 4 which starts with the sub-title "Present Practice in CMDA" is erroneous. The para firstly narrates the present practice of the municipal bodies about imposition of water charges or taxes, and ends with CMDA's *thinking* about 'water tax' and not practice. In fact CMDA which is a nodal development authority, does not have any legal authority to impose 'water tax'. Thus even the statement that "CMDA is, however, seriously thinking of charging water tax..." is also equally wrong.

Since the authors have stepped into the complex and debatable issue of equity and justice in pricing of water, it was perhaps better not to overlook the distinction between financial cost-recovery and social benefit of urban water supply. For, if it was not done, the cross-subsidy solution which the authors gruellingly try to arrive at, would have been resolved with much less effort and *albeit* with greater precision. If the social cost of consuming unsafe drinking water is high, the poor as well as the rich need to be supplied with safe water irrespective of the financial cost. Industrial and commercial demand for water supply is, however, outside the purview of this dictum. Having agreed on this, the question that remains to be answered is as to how the cost of water supply would be met, which, in other words, is the question of cost recovery. Here one of the solutions is cost recovery through a pricing policy which will have such a rate structure that domestic consumption will be charged on the principle of "ability to pay" which is termed as 'affordability', and industrial and commercial consumption will be charged at commercial rate on cost plus principle to make room for cross subsidy. Another solution, partially different from the above, could be full cost subsidy for the poor who cannot afford to pay for water, on social cost argument, and charge on cost basis for others. While the authors deliberate on the first solution, the logic of the second solution has not at all been touched upon.

Accepting for a while authors' pricing policy, the "mechanism of water pricing" suggested by them appears to be amazing. A distinction has been drawn between "big industries and commercial institutions" (Group A) and "medium industries and commercial institution" (Group B). It is wondered how a big industry or a medium industry is defined *vis-a-vis* municipal water supply system. Is it defined by share capital or number of workers or value added or net profit or anything else? And

then if there are 'big' and 'medium' industries and commercial institutions by whatever definition the authors have in their mind, what happens to small industries and commercial institutions? Does none of them need any supply of water? If it is presumed that the size of an industry or commercial institution is measured by number of employees or value of asset, the volume of consumption of water by such units is not necessarily directly related to their sizes. Depending on the type of industry and technology used, even a small unit may consume more water than the big and medium. In such a situation does a smaller unit pay for water at a lower rate than the others?

The authors have divided domestic consumers excluding the very poor into categories, C to E, by their income levels for arriving at differential water rates on the basis of 'affordability'. Absurd optimism has perhaps led them to suggest personal income of consumers as an alternative base for water charges. Data collected so far by various academic and government organisations in respect of personal income have never been even close to reality. Even the rental values of a tangible asset like real estate property which are collected by municipal bodies for determining Annual Rateable Value for the purpose of municipal property tax are generally far away from reality. This is a much discussed and well known fact. If reliable information about rentals cannot be ascertained, classification of domestic consumers by personal income for imposition of progressive rates of water charges is not only unworkable but is also a dangerous proposition, in that the honest consumers will be loaded with relatively more burden than the others.

To reader's further amazement, by the time the authors have reached the section on 'Metering', the income-classification model of rate structure for domestic consumption has almost slipped out of their minds. In this section among the domestic consumers they suggest individual metering for only group C consumers (affluent domestic consumers). For Group D and E the suggestion is:

Group metering or district metering, so that the consumption of a particular locality can be found and which may be distributed among the consumers, either on valuation basis or on per capita basis or ferule size basis.

Here the income criterion so elaborately stated before has been lost sight of. The mechanism suggested here, instead of conforming to the earlier mechanism advocated by the authors, propose altogether different alternatives for distribution of the cost of water supply in a particular 'locality' which is to be determined by single meter for the entire 'locality'. The first alternative is sharing of cost by the consumers on

'valuation basis'. This cost recovery measure tantamounts to imposition of water rate very similar to property tax. But earlier the authors have observed that "...these revenues (water rate) are able to cover only a small fraction of the operating cost..." (p. 79). If it is so the solution is revision of the rate structure to make the revenue compatible with cost. Thus this alternative is nothing but old wine in a new bottle. The second alternative is sharing of the localitywise determined cost by the consumers on a per capita basis. Here again the authors' own 'affordability' concept has been scotched by themselves. In building up the 'mechanism for water pricing' the authors have clearly observed that "Depending on the affordability a multi-tier tariff policy may be framed which satisfies the financial requirements" (p. 80). But they themselves negate the concept of 'affordability' by suggesting the sharing of cost on the basis of per capita consumption. If deprivation from safe drinking water has high social cost, minimum need of water for the poor cannot be different or less than that of the rich. The third alternative is cost sharing on the basis of ferule size. This alternative is nothing but a substitute for metering system. Assuming that this system is workable it is wondered as to why it should be specific to groups E and D. In pages 80-81, the authors have arranged different categories of consumers (Group A—G) in descending order of volume of consumption of water, and have related the personal incomes of each of the groups B to G in the same order. Depending on the consumption levels of individual consumers, the ferule size could be determined for all the groups and the rate structure could be related to ferrule sizes. In other words bigger the ferule size, higher may be the rate of water charge.

Successful functioning of 'group metering' is by itself doubtful. It may not even be socially and politically acceptable to people.

'Concessionaire system' is quite novel but the social evils which it may breed need to be reckoned with. Theoretically, it is not an 'utopian' idea, agreed, but its success in other developing countries may not necessarily replicate here. In a concessionaire system, as is understood from authors' statement, the stand posts are maintained and operated by contractors appointed by the municipal authority, who have the power and authority to sell water to consumers, during the period of contract, at a price 'fixed by the government'. The highest bidder gets the contract. This system is in fact very similar to auctioning of selling right of water to extra-governmental agency whose motive for entering into contract cannot be anything but maximisation of profit. Associating private profit with an essential civic service and that also in regard to weaker section which alone is the user of stand posts, is by itself a dangerous proposition in that it may turn out to be a source of exploitation.

Book Reviews

Politics of Water Supply: The Case of Victorian London, ASOK KUMAR MUKHOPADHYAY, Calcutta, The World Press Ltd., 1981, pp. 227, Rs. 100.00.

This is an account of how London acquired the public ownership and management of a utility service to provide assured supplies of potable water. Here the author is primarily concerned with the period between 1820 and 1902. The events leading to and arising from the subject of his study have also been presented. It is a work on political-historiography.

In the beginning, like many other cities of the world, the residents of London secured their own supplies of water from dug-wells, springs, streams and the river Thames. The Corporation of the City of London recognised the need to organise the supply of such a staple and set up in 1236 a simple device consisting of open channels connected to fountains. Water could be drawn from these fountains free of charge for domestic use. The rich appointed water-carriers to collect water for a small charge. It was a humble device to start with and looked more so as the city grew in size. Construction of additional channels to tap the more distant sources and of additional fountains were the measures that the city-corporation took to meeting the growing demand. The system was inconvenient. The quality of water was also questionable. Any alternative technology appeared as beyond the means of the Corporation to obtain.

In 1607, a project to construct a closed channel, obviously to improve the quality of the supply, was given to a private entrepreneur, who succeeded in getting King James I as his collaborator to instal it. Thus began a process of private ownership and management of a utility service in London. Number of water-companies proliferated as the area of urbanised land expanded. Pipes were laid to deliver water to individual households. Such a state of affairs continued till 1902, when the Metropolitan Water Board was created to acquire all the privately owned water-companies, to set up new water-works with distribution system and to run the service on its own. The process, through which water supply as a source of private profit came to be regarded as a public service, is what this book is concerned with.

The process was decidedly political and its study is worthwhile on many counts. The base of all political processes are given by the feelings, expressed or unexpressed that people carry about a situation. The first public protest about the arbitrariness of the private water-companies came as early as in 1820. These companies were run on commercial lines to derive profit. Different companies supplied water over different areas, yet with considerable overlap between these. Such a situation was created in the true spirit of *laissez faire* on the assumption that competition would assure abundance, efficiency and consumer benefit. The reality was somewhat different from the promise. Rivalry between companies led to the laying of multiple supply-lines running under the same road, to engaging zealous canvassers to capture market (consumers) for each company, to employing unattached plumbers to shift the consumers from one supply line to the other and to digging up of the roadsurface continually. All these involved colossal wastage of capital-equipment, increase of maintenance charges, decline in the quality of supplies and water-riots between companies for the acquisition of loyal canvassers, plumbers, consumers, etc.

The companies still earned profit by transferring all the risks upon the clients. Such risks included those arising from mis-management, health-hazard, breakdown of supplies, supplying water for fire-fighting to the city-corporation, vestries, etc. All these were accommodated within the charges levied upon the property holders. When the landlords failed to pay the bills, the companies disconnected the houses by disregarding the needs of the tenants. Where the tracts were sparsely populated, the companies considered it unprofitable to service these and such tracts were left without it. Thus, the residents of London had all the reasons to oppose the idea of vesting the responsibility of water supply to any private company.

Public protests persisted for over eight decades. Petitions, protest rallies, lobbying, pamphleteering, editorials in newspapers and professional journals were some of the diverse styles adopted by the residents of London. These were matched through setting up and promotion of enquiry committees, technical committees, commissions, private and official bills in parliament, select committees, etc., by the competent authority. All these have been documented. While the readers may not accept the structure of periodisation offered by the author, the quality of documentation is unquestionable. For the same reason, the personal observations of the author on the political process under reference, even though these may appear trite in some instances, hardly reduce the importance of the book. The richness of the evidences will let the readers draw other conclusions or richer hypotheses on the process. On this ground alone, the book will appear interesting and useful to any

student of urbanisation irrespective of which of the related academic fields he might belong to.

There was a long time-gap between public identification of discomforts and their final removal. A political analyst has a responsibility to explain this fact of delay. The author has chosen, so it appears to the reviewer, to explain by placing the question between the contentions held by the political parties (pp. 172-73). He has classified these into the Progressives and the Conservatives. He has further asked us not to forget that the Conservatives in London throughout the Victorian period were inspired by "a high regard for the rights of private property" (p.173). This we consider as a rather stale observation on the politics of water supply in London. We cannot consider this fact of "high regard for private property" as a differentiating attribute between the contenders. The author does not state anywhere that the posture of the Conservatives was matched by a high disregard for private property amongst the Progressives. On the other hand, his evidences indicate that at no stage did the Progressives advocate any principle of confiscation of the assets of the water-companies. The real issue, in the opinion of the reviewer, separating the two groups was the principle to be followed to adjudicate upon the amount of compensation to be paid to the water companies in the event of any taking-over of their business by any competent authority. However, such personal observations of the author, for reasons stated earlier, do not reduce the merit of the book.

We feel that the politics of water supply was a game played between different interest groups in Victorian London. The interpretations made by the interest-groups of the prevailing situation varied between them. The consumers found the situation as unacceptable. At the same time, the share-holders of the water-companies found the received dividends comfortable. Therefore, one cannot claim that the Londoners as a single collectivity found the situation as equally intolerable. Nevertheless, the author felt a need to nest another personal observation on this issue. For example, he claims that the "present study... lends little support to the 'intolerability' thesis which wants us to believe that, as social situations become intolerable in nineteenth-century Britain reforms were produced" (p.174). We consider it to be an unwarranted observation because no measure of intolerance is anywhere available. Therefore, no scientist is obliged to respond to statements which are not verifiable, however voluminous might be the debate on such non-issues. Incidentally, the author has referred to seven papers on this debate.

The point to note is that there were the sufferers and that they were not feeling equally uncomfortable with their placements within the situation. For example, the quality of water supplied to the residents varied between each service area. The efficiency of maintenance service

differed between the water-companies. The author has left such differentiating factors practically untouched. It is true that all the rate-payers were hurt as the charges of water were linked with the value of property, which, when raised upward, made water dearer without increasing the quantity or improving the quality of supplies. But this was not enough to provide a shared identity between the sufferers. For, we find them divided as the water-companies wished to fix the charge by water-meter. The wealthy owners of warehouses, merchants and owners of business and office-buildings, etc., liked the idea of metering the supply, since they obviously needed to consume less water to run such establishments than did the poorer householders. We wish to assure our readers that this information is given by the author himself, but not in the text. It is given in a footnote (no. 161, Chapter 2, pp. 68-69), which itself is an evidence on the analytical framework that the author had in mind. He was obviously not prepared to look upon the process as an exposition of conflicts between the interest-groups.

Assuming that the sufferers faced varying situations, it then becomes reasonable to expect that the solutions suggested by them would also vary. They needed an institutional platform to meet, exchange their respective stands, indulge in horse-trading and arrive at a consensus. The basic attribute of Victorian London was that, until the London County Council was formed in 1889, no such common institutional platform was available. The institutions of local government in the shape of vestries, city-corporation, boroughs, etc., had parcelled out London into many parts. Parliament was the only institution available to the sufferers, to lodge their protests to. But this institution was far removed from most of them. Those who had access to it played the role of promoters, pretenders, defenders, or by any other name we may wish to describe their activities. They did not strictly represent the interest-groups in order to participate effectively in any horse-trading. They could give or take on their own rights and not on behalf of others. They did not carry any such authority.

After the London County Council was established, the style of politics of water supply changed its character. The new institution emerged as a spokesman with due authority from the people. Yet to resolve the problem, the London County Council was not a truly representative institution. The aggregate service area of all the water-companies taken together was larger than the territory under the London County Council. There were the other municipal organisations within this aggregate command area, which had equal claims on the ownership and management of the existing supply-system as the London County Council. The only appropriate institution that could resolve the problem was identified in the shape of the Metropolitan Water Board

covering the aggregate service area and was established in 1902. Therefore, this event cannot be seen as an act of compromise as thought of by the author (p. 175).

The same logic was applied to constitute the Thames Water Authority in 1973, which extending over the entire basin, took over the work of the Metropolitan Water Board. The concept of hydro-geological basin management had by then been nationally accepted, within which the idea of municipalisation of water-supply was untenable. An institution to allocate and to adjudicate upon extraordinary uses of water was necessary. Hence, we do not agree with the author that the replacement of the Metropolitan Water Board by the Thames Water Authority "was palpably a discrimination against local government" (p. 194). A municipality, we may admit, can also appear as making extraordinary use of water and can, thereby, threaten the interests of other municipalities and the sundry consumers of water within a basin.

—SATYESH C. CHAKRABORTY

Urban Problems and Policy Perspectives, (Ed.) GOPAL BHARGAVA, Delhi, Abhinav Publications, 1981, pp. xiii + 31, Rs. 150.00.

This book is somewhat unique in that it has been brought out by a group of social scientists working in a government department on a full time basis and they have found the time and energy to meet frequently, to consider the various papers, discuss them and then bring out a volume covering a series of contemporary studies in the field of urban problems and policy perspectives. Rightly so, the association has not claimed any com prehensive coverage or even thematical continuity. It is a collection of papers prepared by people working in the field on different aspects of urban problems and provides a convenient reference in regard to some of the work being done in this field.

A few of the papers have gone into some depth of the problems of urbanisation and its future perspective but most papers are based upon information put out by planning authorities, government departments and housing agencies. In many cases the papers are merely reports prepared in the government departments not published and studies undertaken there confined to the files and these reveal a great deal of information not otherwise available and which would be found useful. By publishing such material, the book has rendered a valuable service, but at the same, the limitations under which the studies were carried out not having been mentioned, one may come to conclusions not actually warranted. An indication would have provided the reader a more factual status about the papers.

Looking from the coverage, it is an ambitious effort and if it has

not achieved its full purpose, it is apparently not because of lack of effort but the non-availability of contributions and sometimes omission of even available papers published material. For instance, the published and unpublished papers brought out by National Institute of Urban Affairs which have covered the urban perspective rather well have not been even mentioned. Where papers are reproduction of reports put out by established agencies, an appropriate acknowledgement would have been normally expected.

Among the goals the book set out to achieve is that of providing a fresh approach to enable planners and others effectively to diagnose problems, assess their impact and prescribe appropriate solutions. One does not find this fresh approach as the papers mostly set out facts and problems and do not indicate any breakthrough in new thinking. Management of cities studies has come in for a strong criticism but the planning effort appears to have been by-passed. It is now realised that planning is an integral part of total management and where proper result-oriented positive planning is not pursued, managements tend to become short-sighted in search of immediate goals and the benefits derived from it.

The case studies covered are those of the walled city of Delhi, Calcutta in its regional perspective, and Ludhiana. The Ludhiana study stands out in this group perhaps because of the large amount of work done in that city during the last ten years. The paper, however, once again appears to be truncated as the conclusions in regard to the perspective are very general and lack conviction.

In going through the papers sectionwise, one gets a feeling that if greater attention had been paid to the structure and composition of the subheads as also the papers covered by each subhead, the book could perhaps have achieved better integration.

In the overall, the Social Scientist Group has to be congratulated on its bold attempt to bring out this volume and wish its future efforts even better success.

—C.S. CHANDRASEKHARA



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SPECIAL ISSUE
ON
URBAN FEDERALISM

Contents

	PAGE
Editorial	v
Articles	
FINANCIAL ASSISTANCE TO MUNICIPALITIES IN AUSTRALIA, THE UNITED STATES AND CANADA	1
<i>Melville M. McMillan</i>	
THE FEDERAL, STATE AND MUNICIPAL GOVERNMENTS: CAN THE TRIO MEET?	24
<i>Nirmala Banerjee</i>	
STATE-MUNICIPAL FINANCIAL RELATIONS IN WEST BENGAL	35
<i>Bhabatosh Datta</i>	
THE FINANCE COMMISSION AND MUNICIPAL FINANCE	54
<i>M.N. Buch</i>	
MUNICIPAL REFORMS AND STATE-MUNICIPAL ADMINISTRA- TIVE RELATIONS IN WEST BENGAL	59
<i>Abhijit Datta</i>	
HOUSING AND URBAN FEDERALISM	72
<i>M.K. Moitra</i>	

FINANCING URBAN DEVELOPMENT IN CALCUTTA: A CASE OF
CENTRE-STATE FISCAL RELATIONS

85

Kalyan Biswas

CENTRAL-LOCAL RELATIONS: A FRAMEWORK OF ANALYSIS

98

Asok Mukhopadhyay

Book Review

REPORT OF THE WEST BENGAL MUNICIPAL FINANCE COM-
MISSION (CHAIRMAN: PROF. BHABATOSH DATTA)

109

Rakesh Mohan

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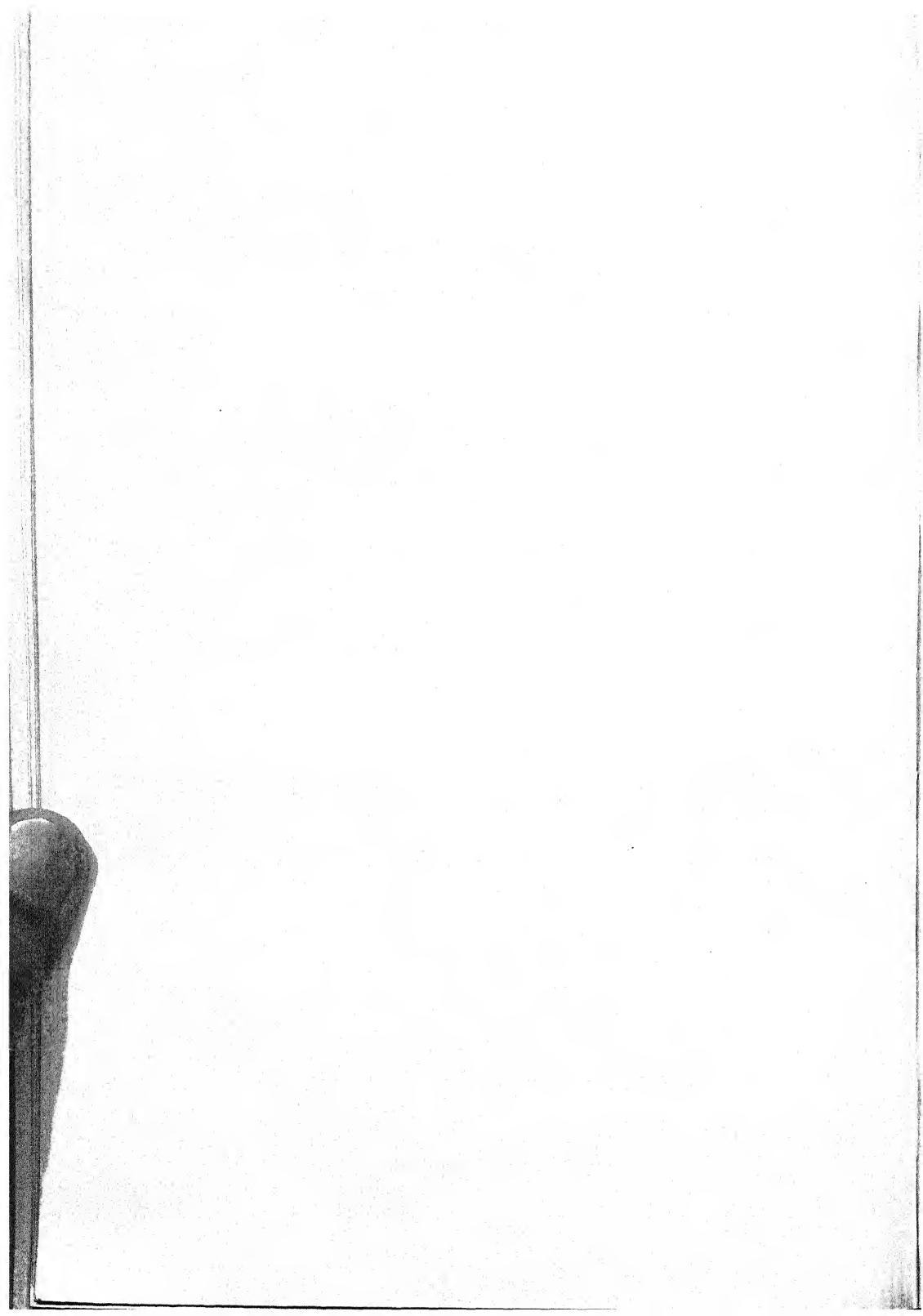
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Editorial

The theme of this special issue is: 'Urban Federalism', meaning inter-governmental relations in urban areas. Unlike western federations, in India the term 'federalism' has a restricted meaning to embrace only centre-state relations. It has been our endeavour to show that this is neither the prevailing practice elsewhere, nor does it follow from any constitutional limitation; in fact, the inclusion of municipal (if not all local) governments within the vortex of Indian federalism is a logical corollary of the concept of a federal polity. From this, the institutional implications follow, such as, direct fiscal relations between the federal and local governments through the Planning Commission (India) and the Finance or Grants Commissions (India, Australia), as also the role of a watch dog institution, like, the Advisory Commission for Inter-governmental Relations (USA, Australia).

The articles appearing in this special issue will, hopefully, highlight the problems of inter-governmental relations in India's urban areas within the context of relevant experience overseas, both in terms of institutional practices, as also in identifying areas of future research. We also hope that this will be of use to the practitioners and students of both the Indian federal and urban scenario.

—*Editor*

Financial Assistance to Municipalities in Australia, The United States and Canada

MELVILLE M. McMILLAN

DURING THE past thirty years municipalities' fiscal relations with other governments have become more integrated and more complex in Australia, the United States and Canada. Through the fiscal inducements of intergovernmental transfers, local governments have come to consider more non-local interests in a variety of areas and to rely less on local revenue sources. This change has not been an autonomous development but reflects the increasing economic and social integration of these societies.

In this paper I review the nature and significance of the fiscal arrangements between municipalities and other governments in these countries.¹ The comparison is valuable because distinctly different approaches have been adopted and financial responsibility differently allocated. A country by country review follows and the paper concludes with some reflections on the lessons that might be drawn from the exercise.

AUSTRALIA

Intergovernmental transfers to municipalities in Australia represent about one-quarter of municipal (non-loan) revenue. In many sources, transfers from the Commonwealth government appear relatively unimportant in comparison to the grants made by the states but such data give a false impression of the Commonwealth role. Through specific purpose transfer programmes with the states, the Commonwealth government has long been a major source of the funds transferred to local (*i.e.*, municipal) governments by the states for certain activities. Predominant among those have been Commonwealth road grants (dating back to

¹Note I focus on municipal governments rather than local authorities which in most of the United States and Canada also includes school districts. Even among municipalities there can be substantial differences in the scope of responsibilities. Generally, municipal governments in the United States and Canada have a somewhat larger fiscal role than their Australian counterparts, McMillan, 1981.

1923-24) which required that certain allocations be made to local roads. Even prior to Commonwealth revenue sharing with the local governments, 1973-74 for example, while direct Commonwealth grants amounted to only \$2.7 million of \$155.8 million, local road assistance funded by the Commonwealth but passed through the states was \$67.5 million and other indirect specific purpose assistance was \$25.7 million. Thus federal funds actually accounted for over 60 per cent of the transfers to local authorities.²

A major transition in the Commonwealth-local inter-governmental fiscal relations was initiated during the period of the Whitlam government, 1972-75. In pursuing its policy to restructure and enhance local government, the Commonwealth Labour government directly injected new federal funds into the government system with the intention that these would be employed to extend the services of local government and thereby its role and position. Whereas, before 1973-74, local government had received practically no funding directly from the Commonwealth, by 1975-76 direct specific purpose transfers had increased to \$106.5 million—primarily funding a regional employment scheme. In addition, specific purpose transfers passed through the states to local authorities were also increased dramatically. These moneys were chiefly directed towards extending sewerage services and area improvement programmes. Most significant, however, was the introduction of unconditional transfers to local governments by the Commonwealth, nominally passed through the states and distributed according to the recommendations of an expanded Commonwealth Grants Commission.³ Funds for that programme amounted to \$79.9 million in 1975-76. Thus, within two years, inter-governmental transfers to local governments almost tripled, mostly because of changed federal policy and funding.

The Whitlam government's local government policies were not unanimously applauded. The state governments saw the expansion of direct Commonwealth-local relations aimed at enhancing the role of local authorities as an infringement of their prerogatives and a threat to their status. Consequently they balked at and were often openly hostile to the new arrangements. In addition, support by local authorities was undermined by the fact that under the equalisation criteria adopted by the Grants Commission for determining the unconditional grants, 70 of the 876 local governments which applied did not receive grants in 1974-75

²Because states' transfers to local governments from their own sources are not reported separately, these figures must be viewed only as an indication of the magnitude. See Mathews, 1979, p. 163.

³It was intended that payments would be made to regional authorities but because this part of the policy did not fully materialise, grants were paid directly to the local authorities.

(13 others did not apply), while 41 received nil grants in 1975-76.⁴ The unsuccessful applicants had the sympathy of local governments in general which tended to feel that the programme should provide general support as well as equalisation, that is to some extent it should involve general revenue sharing.

The local government equalisation programme initiated by the Labour government was converted to a revenue sharing programme under the 'new federalism' policy of the Liberal-National Country Party coalition (Fraser government) elected in December 1975. The major features of the Fraser government's local government policy were:

- (a) local government was to receive a specific share of personal income tax revenue;
- (b) all local governments would share in a portion of the funds (Element A) to be distributed on a per capita basis;
- (c) the remaining portion (Element B) was to be distributed according to principles of fiscal equalisation; and
- (d) State Grants Commissions would be responsible for the distribution of the funds within each state.

The portion of income tax collections to be shared with local governments was initially (for 1977-78) set at 1.52 per cent of personal income tax collections in the previous year. This was based upon the size of Commonwealth grants to local governments relative to those tax revenues in 1976-77. A commitment was made to increase this share to 2 per cent by 1980-81 but the share remained at 1.52 per cent through 1978-79. It was increased to 1.75 per cent in 1979-80 and became 2 per cent in 1980-81.⁵ Because of partial indexation of personal income taxes, the real growth in the revenues from the tax-sharing arrangements was somewhat less than local governments anticipated. The Commonwealth-local revenue sharing programme was established in conjunction with a Commonwealth-local tax-sharing arrangement under which until 1980-81 the state governments received 39.87 per cent of the previous year's personal income tax collections by the Commonwealth. The latter

⁴The Grants Commission adopted equalisation criterion and procedures for determining grants to local authorities parallel to those it had been employing in assessing grants for states. In general, these involved calculating the revenue-raising capacities and expenditure requirements (for an average range and quality of services) on a per capita basis and comparing these with a standard for similar communities. Deficiencies due to the lack of revenue-raising capacity and cost differentials relative to the standard where they occurred called for an equalising grant. Because of limitations in the data, differences among the various sorts of communities and variations in responsibilities among states, considerable judgement was necessitated.

⁵Through their associations, local governments have argued for a 5 per cent share; a request they have only recently moderated.

arrangement has been recently replaced by a new system of tax sharing whereby from 1982-83 the states will receive 20.72 per cent of total Commonwealth tax collections in the previous year.

A variety of opinions was expressed about the portion of the local tax share funds which were to be distributed on a per capita basis. The Commonwealth Grants Commission recommended 30 per cent, subject to different weights for different categories of municipalities. This recommendation was not accepted and instead it was decided to set 30 per cent as the minimum portion to be distributed on a per capita basis but to allow weighting based on size, density and/or other agreed criteria. The size and distribution of Element A has varied widely among the states—from 30 per cent allocated on a simple per capita basis in South Australia and Tasmania to 80 per cent with weighting factors in Western Australia.⁶ The remaining portion, Element B, is distributed according to equalisation criteria along the lines of those utilised by the Commonwealth Grants Commission although the specifics vary among the states.

The State Grants Commissions were established to restore the state-local relationship (that is the states' authority over local affairs) which state representatives saw as having been eroded during the Whitlam years. The State Commissions were made responsible for the intrastate distribution of funds and the Commonwealth Grants Commission was limited to recommending the inter-state distribution. This change put the Commonwealth Grants Commission in a rather awkward position. The practice it had used to decide upon the inter-state allocation was to consider the situation of individual local units and aggregate these to the state level to arrive at a basis for determining the state relativities. Yet to continue to do so would require the co-operation of the states and their Grants Commissions. This interdependence posed the problem of the independence and authority of the separate Commissions and the duplication of effort by them and the Commonwealth Commission. In particular, if the State Commissions were to act independently and employ their own criteria, the allocation to a state and the distribution within a state would be determined on different, and perhaps inconsistent, bases. Facing this problem, the Commonwealth Grants Commission recognised the potential desirability of it recommending inter-state allocations on the basis of broader criteria, such as the distribution of population or income among states, rather than those relating specifically to individual local governments. The initial state relativities (1976-77) were based on the aggregation of local disabilities and were revised in

⁶The portion allocated to Element A only exceeds 40 per cent in Western Australia. The implications of such a high proportion being allocated to Element A in Western Australia has led to criticism by those concerned about equalisation. See Mathews, 1981, p. 219.

1977-78 under somewhat modified criteria. Those relativities determine the current allocations but the Commission has proposed for the Commonwealth government's consideration a number of alternative criteria for distribution.⁷ While the Commission suggests a simple population basis for special consideration it would seem more reasonable to at least weight population by a factor reflecting the state-local sharing of responsibilities, which varies considerably among the states.

In introducing its tax-sharing arrangement with local government, the Fraser government overhauled the whole grant programme for local authorities. Many of the specific purpose programmes initiated by or expanded under the Labour government were discontinued or severely cut back while general purpose assistance through the tax-sharing arrangements was expanded. Thus, between 1975-76 (the final financial year reflecting the policies of the Labour government) and 1977-78, general assistance went from \$79.9 million to \$165.3 million while specific purpose Commonwealth grants to or for local governments fell from \$263.6 to \$151.7 million. Total Commonwealth support to local government fell over this period. By 1980-81 general assistance through tax-sharing reached approximately \$300 million but specific purpose Commonwealth funding rose more slowly to about \$166 million. Also, while revenue sharing entitlements have risen rather sharply since 1978-79, state grants to local governments have tended to stabilise moderating the total growth of transfers.

Given that their significance and the lack of large inter-state disparities, Commonwealth grants afford considerable homogeneity to local government finance across states. Yet on a per capita basis, Commonwealth grants directly to or intended for local governments vary among states. There is greater variation in grants from states' own funds. Western Australia provides the least while state support in Queensland is relatively generous. Variations occur partly because of inter-state differences in local responsibilities. For example, the amount of federal road assistance passed through to the local level and the amount of state funded road assistance depend upon the state-local sharing of responsibility in that area. Grants as a percentage of local outlays also vary among the states but less so than the level of assistance.

State grant programmes are usually conditional schemes. Prior to revenue sharing, only New South Wales and Western Australia had small unconditional assistance programmes (which have subsequently been incorporated with their States' Grants Commission allocations). Specific purpose grants are offered for a wide range of activities in the areas of public works, recreation and culture, and health and welfare, but road grants are by far the most significant, typically representing about one-half the

⁷Commonwealth Grants Commission, 1979.

total conditional assistance provided. Grants for roads finance about one-fifth of local road expenditures and about one-half of local education, health and social welfare outlays.

Inter-governmental transfers represent approximately one-quarter of Australian municipal governments' revenues. Although most of this is passed through the states, the Commonwealth government is the source of about two-thirds of the funds with the states funding the other one-third from their own sources. Forty per cent of the transfers are unconditional, provided through the Commonwealth's revenue sharing programme, and the remainder are conditional grants of the state and Commonwealth governments.

THE UNITED STATES

Local inter-governmental fiscal relations in the United States entail a complex web of federal and state programmes. The inter-governmental system grew tremendously during the 1960s and 1970s but in so doing became increasingly exposed to criticism which has now led to a period of severe reappraisal. Consequently, inter-governmental relations in the United States are now in a state of flux as the nation seeks to redefine roles and responsibilities in its federal system. Here, I will attempt to map briefly the major features and developments of the American system and reforms which are underway.⁸

Through the 1970s

Especially significant for local governments was the passage of the State and Local Fiscal Assistance Act of 1972. It initiated a new phase in American inter-governmental relations. For the first time, the federal government would distribute to state and local governments a share of its revenue in the form of relatively unrestricted non-matching grants. The programme emerged from the mid-1960s Heller-Pechman proposal that the federal government, which was then flush with funds, share a portion of its revenues (they suggested two per cent of individuals' federal net taxable income) with the less affluent state and local governments in an effort to remove the growing imbalance in the federal system. The idea quickly took root and a revenue sharing programme emerged which was intended to address several inter-governmental issues. The major objectives usually noted include: (a) providing state and particularly local governments access to revenue sources more responsive to income, (b) assistance in the provision of needed services, and (c) reduction in the fiscal disparities among states and among local governments. The over-

⁸For a good survey of intergovernmental grants in the United States prior to the most recent changes, see Break, 1980, Ch. 4 and Haskell, 1979.

all intention was that state and local governments would achieve greater fiscal independence which would result in the decentralisation of government decision-making and a more diverse and locally attuned response to issues.

With these objectives in mind, the United States government allocated \$30.2 billion to be distributed to state and general purpose local governments over an initial five-year trial period beginning in 1972. (The legislation has subsequently been renewed with only minor changes.) The legislation provided that the funds be allocated over the five year period without requiring annual approval, thus assuring continuity over that period. Although not directly tied to a tax base, the monies allocated approximated 1.3 per cent of the personal income tax base. The funds were distributed to the state governments with the provision that two-thirds pass through to local units without any reduction of state grants to them.⁹ Only general purpose local governments are eligible for revenue sharing monies, thus excluding school districts and other specific local units. The distribution of funds among governments is determined by a formula to be discussed below. The recipient governments were required to spend the money in certain priority areas and a report of their expenditures. However, these areas were so broad that the funds were almost unrestricted. In addition, priority areas were deleted with the 1976 revision.

The available revenue sharing funds are distributed among the states according to either a three or a five factor formula. The three factor formula includes population, tax effort and the inverse of per capita income while the five factor formula adds the per cent of the population living in cities of 50,000 persons or more and state personal income tax collections. Each state selects the formula for calculating its share which is most favourable to it, and all the shares are then adjusted proportionately to sum to one. Within states, the two-thirds of the state allocation passed through to the local units are distributed according to a variation of the three factor formula subject to maximum and minimum restrictions.

The assessment of revenue sharing as a transfer programme depends upon the weight given to different objectives. Musgrave and Musgrave (1980, p. 560) note the need to distinguish among the substitution of federal for state and local revenue, the stimulation of expenditures and fiscal equalisation as objectives. As far as substitution and stimulation is concerned, the evidence is mixed for local governments but generally it appears that the larger (and more financially pressed) cities used the revenue to maintain existing services and stabilise local tax rates but

⁹The one-third: two-third state-local split did not account for the often considerable variation in the distribution of state-local responsibilities.

smaller cities had more discretion and were able to use the funds for tax abatement and new capital facilities (Break, 1980). While concern for everyone in getting a fair share of the revenue sharing pool meant that fiscal equalisation was not a primary objective of the programme, the formulas did result in some modest equalisation. Musgrave and Musgrave (1980) report a slight negative correlation among states ranked by per capita income and per capita shared revenue. The five states with the lowest per capita incomes received \$31.15 in per capita shared revenue versus \$25.29 for the five highest income states. Some horizontal equalisation also occurred among local units within states, particularly between cities and the more affluent suburbs. Intra-state equalisation was limited by the floor and ceiling constraints on local allocations. The extent of inter-state equalisation is somewhat greater if one considers the net redistribution, *i.e.*, the share of shared revenue less the share of federal taxes required to finance the programme. Looking at the ten largest net gainers (\$1.51 or more shared revenue per dollar contribution) and losers (less than \$.85 per dollar), the net gainers tend to be low income rural states while the net losers are the high income urban states.

While approximately \$6 billion dollar annual funding of the General Revenue Sharing Programme is absolutely large, it needs to be put into perspective by comparison with other grants and governments expenditures. In 1975, the \$6.1 billion for revenue sharing contrasted with \$37.6 billion of federal categorical grants to state and local governments and \$5.4 billion of broad based grants and thus constituted about 12 per cent of the \$49.7 billion of total federal inter-governmental transfers (Table 1). By 1980, revenue sharing funds slipped to about 7.5 per

TABLE 1 FEDERAL GRANTS, REVENUE SHARING BY TYPE,
UNITED STATES

	<i>(Billions of dollars)</i>			
	1960	1975	1980	1982*
General Purpose				
General Revenue Sharing	—	6.1	6.8	4.0
Other	—	.9	1.8	1.9
Broad-based				
Block Grants	—	5.4	9.4	10.2
Other	—	5.4	1.0	.4
Categorical	7.0	37.6	72.4	70.3
TOTAL	7.0	49.7	91.5	86.8

*1982 values are estimates.

SOURCES: 1960 and 1975 data from R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory and Practice*, New York, McGraw-Hill, 1980. The 1980 and 1982 data came from ACIR, *Intergovernmental Perspective*, Vol. 8, No. 2, Winter 1982, p. 6.

cent of the total. Revenue sharing funds also represent a small portion of state and local expenditures. Initially, the respective shares represented approximately 2.6 per cent of state expenditures and 3.4 per cent of total local expenditures (but 5.4 per cent of the expenditures of local units receiving shared revenue). These figures have diminished as federal revenue sharing funds have declined from 3.2 per cent of state and local expenditures to 1.85 per cent between 1972 and 1980. General Revenue Sharing funds did not grow rapidly and consequently. Their real value has been eroded by inflation. When viewed in this context, the role of General Revenue Sharing is much more modest and this suggests that it was the significance of the concept more than the amount of the funding which warranted the considerable attention devoted to the programme.

While General Revenue Sharing represented a significant departure from the categorical grant system which preceded it, it was but a part of the growth of federal inter-governmental transfers which bloomed during the 1960s and 1970s. Between 1955 and 1980, federal transfers to state and local governments increased from \$3.2 to \$88.2 billion (Table 2). Even in constant dollar terms, this represented more than an eight fold increase. As a result, federal aid became a most important revenue source to state and local authorities. As a percentage of own source receipts, federal transfers increased from 11.8 to 31.7 per cent between 1955 and 1980. The change was most dramatic for local governments which over the 1970-1978 period saw federal aid as a percentage of own revenues more than triple from 5.1 to 17.5 per cent. Revenue sharing funds represented a particularly large part of that aid and explains the great popularity of that programme with local governments. The states had experienced a major surge of federal assistance before 1960.¹⁰

Federal aid to the states is predominately to assist education (post-secondary and employment training), public welfare, health and hospitals, and highways. Direct aid to local governments is primarily outside these functions. In 1978, 29.1 per cent of the federal aid direct to local governments was for general support (revenue sharing), 19.6 per cent was under the Local Public Works programmes, 15.8 per cent came as a Community Development Block Grant, 12.8 per cent through Comprehensive Employment and Training and 8.0 for housing and urban renewal. Some assistance, chiefly for education and social welfare, is received indirectly via the pass-through of federal grants to the states (ACIR, July 1980).

While federal transfers to local governments have grown substantially during the 1970s, state aid still dominates. In 1980, states transferred

¹⁰In addition to direct financial aid to local governments, the federal government provides assistance indirectly by permitting the deductibility of homeowners' local taxes in the calculation of federal personal income tax liability. This provision enables local homeowners to shift part of their property tax burden to the federal government.

TABLE 2 INTER-GOVERNMENTAL TRANSFERS: UNITED STATES, SELECTED YEARS

	1955	1960	1965	1970	1975	1978	1980	1982*
<i>Federal to State and Local</i>								
Current Dollars†	\$3.2	7.0	10.9	24.0	49.8	77.9	91.5	88.2
Constant (1972) Dollars†	\$5.8	11.6	15.8	26.9	39.4	49.6	48.4	39.0
Federal Aid as percentage of State-Local Own Receipts	11.8	16.8	17.7	22.9	29.1	31.7	31.7	24
<i>Federal to State</i>								
Current Dollars†	\$2.8	6.4	9.9	19.3	36.1	50.2	64.3	N.A.
Federal Aid as a percentage of State own Source Receipts	20.9	31.0	32.3	33.5	37.3	37.0	38.0	N.A.
<i>Federal to Local</i>								
Current Dollars†	\$0.4	0.6	1.1	2.6	10.9	19.4	21.1	N.A.
Federal Aid to Local Governments as a percentage of Local Own Source Receipts	2.5	2.6	3.6	5.1	12.9	17.5	16.3	N.A.
<i>State to Local</i>								
Current Dollars†	\$6.0	9.5	14.0	26.9	51.1	64.7	81.3	N.A.
State Aid as a percentage of Local Own Source Receipts	40.6	41.6	43.3	52.4	60.5	58.4	62.5	N.A.
State Aid to Municipalities as a percentage of Municipal Own Source Receipts†	19.4	20.1	22.2	31.0	43.2	36.5	33.4	N.A.

State Aid to Schools as a
percentage of School District's
Own Source Receipts†

69.0	69.3	64.8	75.1	90.3	97.0	121.9	N.A.
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*1982 values are estimated.

†Billions of dollars.

‡Countries, which play a combined school-general purpose role, are not reported.

N.A. = Not available.

SOURCE: Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, 1980-81 Edition, Washington, D.C. 1981, pp. 58-59.

\$81.3 billion to local governments as compared to the \$21.1 billion directly received from the federal government (Table 2). However, the bulk of state assistance, over 63 per cent in 1980, goes to schools. State aid as a percentage of school districts' own revenues rose throughout the 1970s (largely because of legal challenges of the property tax based school financing systems) and now funds more than one-half of school expenditures. State assistance to general purpose local governments has also become relatively more important. As a percentage of municipal own receipts, state aid increased from 22.2 per cent in 1965 to 43.3 in 1975, but slipped back to 33.4 per cent by 1980. Currently, state aid finances approximately one-quarter of general purpose government's expenditures. In 1977, one-third of state (self-financed) aid for general purpose governments was for general support, one-quarter for assisting public welfare and one-fifth for roadways (ACIR, July 1980).

State general (unconditional) support programmes are an important part of state aid in essentially all states. Many state programmes preceded federal revenue sharing. In 1972, the first year of General Revenue sharing, state general support to local governments exceeded local federal revenue sharing entitlements in 17 states. At that time state general support approximately equalled federal revenue sharing for local governments, but state support has since grown so that the \$8.6 billion provided in 1980 was almost double the federal amount. State programmes vary widely in structure and magnitude but often involve some explicit form of tax revenue sharing and fiscal equalisation. In 1977, 40 per cent of state general support was the return of taxes to origin or as reimbursement for state mandated property tax relief, 21 per cent was distributed by population, 23 per cent according to fiscal factors and the remainder according to other criteria (ACIR, December 1980).

Into the 1980s

The discussion thus far describes the growth and development in the United States of a large and complex system of inter-governmental fiscal relations. The pattern which emerged by the late 1970s met increasing criticism and the system is now in transition and on the verge of what may become major structure changes imposed to make it conform with the Reagan Administration's 'new federalism'.

Fiscal relations between the federal and the state and local governments have been dominated by categorical grants. As federal involvement with the state-local sector grew, the number of these specific purpose assistance programmes grew to the order of 500 by 1980 (although relatively few grants accounted for most of the funds). Concern for the inflexibility of such assistance for recipients, centralisation of control, and administration costs were important in the Nixon-Ford Administration and contributed to the development of general revenue

sharing. This concern also led to the consolidation of several categorical grants into fewer block grants, *e.g.*, the Community Development Block grant. The block grants removed cost-sharing requirements and relaxed conditions on the use of the funds (but reduced the federal government's ability to target funds on specific problems or areas). However, even by 1980, block grants only accounted for about 10 per cent of federal assistance.

The Reagan Administration, elected in the fall of 1980, plans to further expand the share of federal aid provided through block funding as the first step towards its new federalism. While aware of the disadvantages of categorical grants, the major concern of the Reagan Administration in this area is for the growing federal 'intrusion' into areas of state and local responsibility. In the short run, federal withdrawal would involve a lower federal contribution to state and local finances, a shift from categorical to block grants to afford greater flexibility to the funds supplied, and less federal regulation of state and local governments. In the longer term, the policy aims at sorting out and redefining federal, state and local responsibilities. Ultimately this action would result in the federal government withdrawing from certain functions and their financing and turning these over to the states and localities, possibly along with some tax sources.¹¹

This reassessment of the American federal system immediately follows a number of other developments which significantly impacted state and local governments. The growth of the state and local government sector came to a halt in 1976 and has since declined.¹² The local sector peaked in 1974, largely as the last of the post-war baby boom passed through the school system. The rapid expansion of federal transfers, particularly to local governments during the 1970s, enabled expenditure growth without heavier tax burdens. However, by 1978-79, that trend too had reversed and real transfers to state and local governments began to decline. The slowing and eventual decline of real federal assistance put more pressure on state and local taxpayers and led to a myriad of taxpayer revolts of which Proposition 13 in California is the most famous. The resulting tax and expenditure limitations further stymied state and local government growth and eroded the relatively strong fiscal position of the states as they sought not only to offer relief from state taxes but also to assist local governments in reducing the property tax burden. Deteriorating economic conditions and an erosion of public confidence in the ability of government to solve society's problems partially underlay these trends. Hence, when the Reagan Administration came to power, its attitudes towards federalism and the federal

¹¹For an analysis of the developments to mid-1982, see Peterson, 1982.

¹²State and local expenditures as a percentage of GNP fell from 15.0 in 1975 to 13.0 in 1981.

deficit, the desire to increase defence spending and pressures to maintain the social security system left inter-governmental transfers vulnerable to cuts.

The Reagan Administration took several actions to trim or otherwise modify the federal grant system. Federal transfers to state and local governments are estimated to decline in 1982 by about 3.7 per cent from 1981 levels. The reduction will result in part from the termination of temporary anti-recession transfers and from the elimination of over 60 categorical grants. In addition, 77 categorical grants and two block grants were consolidated into nine block grant programmes but at reduced levels of funding. The greater flexibility afforded through block grants, it is argued, will help compensate for the smaller amounts.¹³ Direct federal aid to local governments, which had seen the most rapid growth during the 1970s, bore the greatest cutbacks. Furthermore, guided by the policy to enhance the role of the states, the block grants are paid to them with significant (though possibly temporary) pass-through provisions for funds which had previously gone to local governments. So far, these moves have had only a modest effect on the relative importance of block grants in the aid system but further changes are anticipated.

The new administration's cutbacks were consistent with the emerging trend towards constraint. In its second round, 1977 to 1980, General Revenue Sharing appropriations were held constant. When it was renewed for 1981 to 1983, the strong fiscal position of the states and the weakening federal condition exposed the programme to even further attack. The result was that the state share of revenue sharing payments was suspended for 1981 and has since been eliminated for 1982 and 1983 thus ending federal-state revenue sharing. Local allocations were again held constant for the three year period. In 1981, the real value of local revenue sharing funds had already diminished by one-third from 1976. Thus, General Revenue Sharing, the major innovation in American inter-governmental relations in the 1970s, faces a most uncertain future in the 1980s.

For the longer term, the Reagan Administration plans further reductions in federal funding and transfer of certain responsibilities to the state and local governments. Plans call for shortly turning-back responsibility for functions affecting 44 federal assistance programmes involving about one-third of federal inter-governmental transfers.¹⁴ States would be assisted in meeting these new responsibilities by tapping a trust fund financed by federal excise taxes. After 1988, the trust fund would

¹³See Walker, Richter and Colella, 1982 and Peterson, 1982.

¹⁴Among the most important changes, states would assume full responsibility for Aid to Families with Dependent Children and Food Stamps. The federal government would maintain responsibility for Medicaid.

gradually decline and the states would be expected to accept responsibility for the programme as they wished and their financing by phasing-in state excise taxes as the federal government abdicated the area. The new sources of funding would not be adequate to fund these programmes at the existing levels.

The proposed reassignment of government responsibility in the American federal system raises many questions. Obviously, much thought is being given to what should be the appropriate allocation of functions and revenue sources. In addition, there is concern for the effects of such changes upon the level and distribution of public services and so upon the desirability of such decentralisation in a federal system lacking any explicit commitment to or mechanism for fiscal equalisation.¹⁵

The redesign of the federal system may be viewed with some misgivings by local governments. The states in becoming the focus of federal inter-governmental relations are to have their roles restored and have been relatively receptive to the developments. Local governments, and large cities particularly where state and federal transfers have come to represent almost one-third of revenues, are more cautious. How local governments fare will depend largely upon how the states respond to the reduction in federal funds but the initial indications are not good. Reduced federal transfers were not generally replaced by state governments who passed along the costs to local governments, non-profit organisations and direct beneficiaries (often the working poor).¹⁶ Because state aid to local government is coming under considerable pressure, local governments are finding themselves squeezed between restrictions on their tax raising power and reduced state transfers. For local governments, being at the end of the transfer line, seems to have insured that decentralisation of the federal system means austerity. Whether economic recovery and/or other events will prove this conclusion premature is yet to be determined.

CANADA

Unlike in Australia and the United States, transfers from the federal government are a relatively insignificant source of funds for Canadian local governments. In 1980, federal general purpose transfers to local governments amounted to \$161.6 million and consisted entirely of grants-in-lieu of taxes on the property of the federal government and its enterprises which is tax exempt.¹⁷ Local governments also

¹⁵David and Howard, 1982, Lucke, 1982 and ACIR, 1981.

¹⁶Nathan, *et al.*, 1982, Peterson, 1982. Only social welfare spending appears to have benefited from a certain degree of protection.

¹⁷Data is taken from the Canadian Tax Foundation, 1981.

received federal specific purpose transfers of \$192.4 million. Almost one-half of this is for environmental purposes (sewerage and water primarily) while protection, regional development and recreation and culture account for almost all the remainder. The total federal transfers of \$254 million represent only 2.1 per cent of all transfers to Canadian local governments and 4.8 per cent of transfers to municipal (non-school) authorities which are the major recipients.¹⁸ Similarly, transfers to local governments represent only about 2 per cent of its total transfers to other governments.

Constitutionally, local governments are creatures of the provinces and any direct federal-local interaction is constrained by this fact. The federal government may have anticipated a greater role in local affairs during the late 1960s and early 1970s when an Urban Affairs portfolio blossomed and there were some moves to expand federal funding in certain areas—*e.g.*, urban mass transit—but the defensive posture of the provinces and a changed economic climate seems to have stifled any such ambitions. Urban Affairs has disappeared and the new programmes dissolved. The provincial reluctance to see an expanded federal role in the local government area can be attributed in large part to the considerable fiscal independence of the Canadian provinces.

Almost all transfers to local authorities come from and are determined by the provincial governments. As a result, the system of inter-governmental grants is unique to each province. An indication of the variation among provinces is the disparity in the per capita grants to municipal governments for municipal (that is non-school) purposes. In 1980, Prince Edward Island's grants averaged \$45 per capita while in Alberta they were \$358 per head (Table 3). The assistance tends to be lowest in those provinces in which the municipalities have the least responsibilities. Consequently, provincial grants as a percentage of municipal expenditures are much more uniform, usually between 27 and 38 per cent (29 per cent on an average). Even so, the percentages range from 15.7 per cent in Quebec to 60.3 per cent in Nova Scotia.

Another notable feature is the wide inter-provincial variation in the importance of unconditional assistance. While on an average, unconditional transfers are about one-quarter of the total, one province provides most of its aid unconditionally (New Brunswick), the three other Maritime provinces and British Columbia provide between one-third and one-half unconditionally, and elsewhere the unconditional share is lower with Alberta the lowest at 11.1 per cent.

Conditional transfers are offered for a wide range of municipal activities and often through a large number of grant programmes, *e.g.*, about

¹⁸There is some indirect federal contribution provided through unconditional and conditional (for health and welfare particularly) grants to provinces, but even considering that, the overall contribution is relatively small.

TABLE 3 PROVINCIAL GRANTS TO MUNICIPAL GOVERNMENTS IN CANADIAN PROVINCES, 1980

	NFLD	PEI	NS	NB	QUE.	ONT.	MAN.	SASK.	ALTA	BC	All Provinces
Total Grants*	37.5	5.5	245.5	77.9	655.8	2050.0	182.3	258.7	757.4	305.3	4576.0
Grants Per Capita (\$)	64	45	287	110	104	239	177	266	358	115	191
Grants as a percentage of Municipal Expenditure	32.2	27.0	60.3	36.7	15.7	35.3	29.9	37.9	31.5	19.5	28.6
Percentage of Grants Unconditional	43.1	39.4	36.1	78.4	22.5	25.9	24.7	21.1	11.1	45.8	25.6

*Millions of dollars. Excludes grants for school purposes.

SOURCE: Canadian Tax Foundation, *Provincial and Municipal Finances 1981*, Toronto, 1981.

70 in Alberta and Ontario. Almost one-half of the provinces' specific purpose transfers are for health and welfare and one-quarter go to transportation with lesser amounts supporting recreation, environmental health protection and other expenditure areas including fiscal services. The significance of the conditional transfers as a share of the expenditures on these activities varies. Over 70 per cent of municipal health and welfare expenditures is financed by conditional grants in the seven provinces where local governments still bear some responsibility for health and welfare. About one-quarter of municipal transportation expenditures in Canada was met from provincial conditional grants. There is, however, often considerable inter-provincial variation in the degree of support provided to specific local functions.

In the provinces where schooling has not become a provincial responsibility, large transfers are made by the provinces to support education. In 1980, grants to schools amounted to \$6,624.9 million compared to \$4,576.0 million for municipal purposes. Provincial grants finance about 60 per cent of school expenditures. School aid is most commonly provided through school foundation programmes. The difference between approved expenditures and the revenue from a province-wide uniform local property tax is financed by the province. Higher expenditures by a school board must be funded by a supplementary property tax levy on local taxpayers. Grants for schooling go directly to the school boards and are not grants to the municipal authorities.

Unconditional transfers represent about one-quarter of total grants to municipal governments on an average.¹⁹ The prevalence of conditional grants, and municipalities' dependence on them, has caused local authorities considerable concern. They feel that specific purpose transfers distort local priorities and that the conditions represent needless provincial interference and impose unnecessary bureaucratic obstacles.²⁰ The provincial governments employing extensive specific purpose assistance argue that the conditions are necessary to ensure adequate provision of local services and to maintain fiscal responsibility. In view of this conflict it is not surprising that local government finance and provincial municipal fiscal relations have come under scrutiny, especially in those provinces where conditional assistance is used most extensively.²¹ Studies

¹⁹The decline in the portion from one-third in 1978 can be credited largely to the reductions in Quebec resulting from the province's assumption of school financing and the opening for municipal taxation of the area vacated by the schools.

²⁰They are also often felt to be an uncertain source of revenue, subject to variation at the whim of the provinces.

²¹For example, see Nova Scotia, *Report of the Royal Commission on Education, Public Services and Provincial-Municipal Relations*, Halifax, 1974; Ontario, *Report of the Provincial-Municipal Grants Reform Committee*, Toronto, 1977; and Provincial-Municipal Finance Council, *Report of the Provincial-Municipal Finance Council on the*
(Continued on next page)

of provincial-municipal fiscal relations typically recommended a shift towards more unconditional assistance and several provinces have responded positively²² but some provinces, notably Alberta and Ontario, seem reluctant to move in that direction.

An important and innovative restructuring of provincial-municipal fiscal affairs occurred in Saskatchewan with the introduction of revenue sharing in 1978. A number of existing grant programmes were combined and supplemented with new funds to establish over a two-year phasing-in period a revenue sharing fund which would then be escalated according to the growth in the bases of the four major provincial taxes—the personal and corporate income taxes, the sales tax and the gasoline and fuel taxes. The objective was to provide additional unconditional funds to Saskatchewan municipalities and index those to economic growth. Unconditional assistance increased from 13 per cent of provincial transfers to 21.1 per cent in 1980. Saskatchewan also introduced an unconditional capital grant for municipalities to provide up to \$100 per capita over the 1980-85 period.

Both rural and urban municipalities benefit under the Saskatchewan revenue sharing scheme but their treatment differs. The rural grants programmes were not subjected to major change although there was a shift towards more unconditional assistance distributed according to existing equalisation criteria. The allocation of unconditional aid to the urban municipalities was completely reformed. Sixty per cent of the available funds was distributed in 1981 as basic grants of \$1,650 to \$2,420 per municipality and per capita grants of \$45 per person. The remaining 40 per cent was distributed through a foundation grant which paid a portion (depending upon the availability of funds, .749 in 1981) of the difference between each municipality's recognised expenditures and recognised revenues. Recognised expenditures are calculated as the cost of providing a typical level of services (and debt charges) in communities of comparable populations. Recognised revenues are determined as the revenues available from applying a computational (average) property tax rate for communities of that size to the equalised assessment. Neither recognised expenditure nor recognised revenue correspond to a community's actual expenditure or own-source revenue but the values are believed to be representative of those for similar-sized municipalities. The merits of the Saskatchewan scheme are that it considers both the expen-

(Continued from previous page)

Responsibilities and Financing of Local Government in Alberta, Edmonton, Canada, 1980. The Nova Scotia report is reviewed in *Canadian Public Policy*, Summer, 1975, and the Alberta report by McMillan, 1980. For a discussion of the Ontario grant system, see Auld, 1981 and Slack, 1978.

²²Most recently, Nova Scotia has substituted considerable unconditional aid for conditional assistance and Quebec has reduced transfers while expanding the municipal tax base.

diture as well as the revenue side of the picture and is more rigorously formulated than most equalisation programmes in Canada. However, it does not integrate the rural and urban programmes and still leaves Saskatchewan municipalities heavily dependent on conditional assistance.

A revenue sharing programme has operated in British Columbia also since 1978. Through it the province shares about six cents of each (economy-generated) dollar of provincial revenue with municipal governments. The shared revenue consists of the annual yield of: (i) one percentage point of personal income tax; (ii) one point of corporate income taxes; and (iii) six per cent of renewable and non-renewable resource and sales tax revenues. The revenues are distributed through seven grant programmes which include flat grants to municipal governments and regional districts, and local service-oriented grants related to water facilities, housing commencements and highways, but with the bulk allocated under a new unconditional scheme. Eighty per cent of the unconditional grants are to be allocated on the basis of relative (share of) population. The other 20 per cent depends directly upon the share of expenditures and inversely on per capita assessments relative to the provincial average. British Columbia previously relied heavily upon unconditional assistance for its municipalities and this programme does not change that. Rather it affords a means of relating that aid to provincial revenues from traditional growth taxes.

Manitoba has had a tax-sharing programme with its municipalities since 1976. One percentage point of the corporate income tax and 2.2 percentage points of the personal income tax go into a pool which is distributed primarily on a per capita basis. Payments were \$21 per capita in 1980 with an additional \$3.75 to \$5.25 per capita to towns, villages, and cities as an urban service supplement. The Manitoba programme is unique in that the taxes are explicitly designated as a municipal income tax and the municipalities could act to change the rates if they could mutually agree to the move. Thus, the programme is as much a tax base sharing arrangement as a revenue sharing programme. However, the distributed revenues are considered as transfers. Despite this arrangement, unconditional assistance has declined as a proportion of the total assistance to Manitoba municipalities.

None of the other provinces use a revenue sharing scheme to provide unconditional assistance to their municipalities.

LESSONS FROM THE THREE-NATION SURVEY

This review demonstrates that there are strikingly different methods for providing financial assistance to municipalities. In Australia, most of the aid originates with the Commonwealth government and is largely unconditional but in Canada, the federal role is minimal and the pro-

vinces are responsible for the extensive and varied municipal assistance programmes. Major transfers to municipalities in the United States come from both federal and state governments. The important role of the provincial and state governments in Canada and the United States can be attributed partly to their larger and more active fiscal role in comparison to their Australian counterparts. While the state role has always been dominant in the United States, it may be further augmented (or restored) as the current administration pursues its objectives of shifting more responsibility to state and local governments. This trend may move the US system somewhat towards the Canadian in terms of federal-state (provincial) responsibility, but in so doing it must be remembered that the workability of the Canadian approach relies significantly upon a firm federal commitment to equalisation among provinces—a commitment not found in the United States.

All three countries employ inter-governmental transfers and most recently revenue sharing schemes to aid local governments. These need not be the only mechanism. Had we surveyed more widely, we could find instances in which other governments shared their tax bases with local governments thereby reducing the need for revenue sharing or other forms of cash transfers. Such alternatives should also be considered.

Similar trends in the structure of inter-governmental transfers are found in the three countries. Grants began as conditional programmes to assist certain functions but grew and evolved to become the major vehicle for providing broad based support for local government. The inappropriateness of conditional aid for meeting new and more comprehensive objectives have caused a movement towards greater unconditional assistance. Accompanying this shift, there seems to be some feeling in Australia and the United States that in this context the states have a more important role to play.

It would be rash to consider the inter-governmental systems in different countries and claim one is better than another or would be suitable elsewhere. What system is best depends upon the environment in which it must operate. However, experience elsewhere expands our understanding and facilitates better decisions. In considering the alternatives, it also helps to structure the problem about the fundamentals of fiscal federalism (*e.g.*, Oates, 1972). Three major reasons are given for inter-governmental transfers—inter-jurisdictional spillovers, fiscal imbalance and fiscal equity. Where services provided by one community afford benefits (or impose costs) to outsiders without compensation (or penalty) the service will not be provided at the socially optimal level. Inter-governmental grants (or taxes) reflecting the external benefits (or costs) would lead to improvement. Second, if the responsibilities and fiscal capacities of governments are not reasonably matched an imbalance or gap can exist which will result in the under-supply of public goods and

undue tax burdens. Inter-governmental transfers may be used to close the fiscal gap. Alternatively, a different allocation of tax bases and/or responsibilities for public services are also mechanisms which may reduce the problem. Similarly, spillover problems might be resolved by a reallocation of functional responsibilities. Finally, even in the absence of spillovers or fiscal gaps, the abilities of local governments to provide services will vary and possibly by enough transfers will be called for to reduce fiscal disparities through an equalisation scheme. The best type of inter-governmental transfer to use depends upon the purpose—conditional (and probably matching) grants to account for spillovers, unconditional for correcting fiscal imbalances and for equalisation.

In structuring inter-governmental fiscal arrangements, it is important to keep clearly in mind the purpose for which the grants (individually and in aggregate) are intended. Confusion with respect to the objectives can result in a complex, and incoherent system evolving which may only serve to frustrate rather than resolve difficulties. In the three cases studied, ample examples exist of the difficulties caused by confusing objectives. The problem is often made no easier by the real or perceived political needs of donors for visibility and accountability. Structuring a suitable system of intergovernmental fiscal relations is a difficult and continuing task, but rewarding when it leads to an improved federalism.

□

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The Federal, State and Municipal Governments: Can the Trio Meet?

NIRMALA BANERJEE

IN RECENT years, the problem of devising appropriate fiscal relations between federal and municipal governments has attracted a considerable attention in the theory and practice of public finance. Most federal countries have acknowledged the need for revising the traditional position in which there were no formal channels of communication between these two levels of government. Each has experimented with ways of directing federal resources to urban functions without unduly curtailing the autonomy and self-sufficiency of local and state levels of governments. There is often a conflict between national and local priorities so that lower levels of government, while welcoming federal resources, resent their allocation for specific purposes. On the other hand, it is not surprising that the federal government of a large country often finds it difficult to evaluate the relative claims of the numerous urban bodies strictly on principles of relative national social costs. Therefore, these experiments being tried in the different countries have as yet met with only a partial degree of success and are constantly under review. India's case is somewhat of a deviation from this general trend of fiscal federalism in that so far there has been no serious attempt to evolve a long term view point in the matter or design suitable machinery for carrying it out. What help has been extended from the federal government to urban problems has been either indirect or *ad hoc*. This may partly be because of the basic difference between the Indian and other federal constitutions in that the former is initially much more centralised; it may also be because so far urban requirements have received a relatively low priority in the national point of view. But it certainly would not be because the problems in India are any less complex or urgent than elsewhere.

FEDERAL PRACTICES ABROAD

Most federal states were formed by several independent communities

surrendering to a central government only those limited rights and responsibilities which clearly needed a larger jurisdiction. The obvious choices of functions were national defence and border security, ports and other national communications. Along with this the federal governments were given the powers to levy income tax and corporation tax for which equity demanded that information on as wide an area as possible be considered. Apart from these unavoidable central functions, each of the federalising communities had reserved all the residual functions and powers to itself with a view to make its own decisions on what sort and how much of government it was to have; what public activities and tax structure its citizens preferred. Local government formed a specially important element in enriching these choices before the citizens. With a little bit of mobility, individuals could move from the jurisdiction of one local or municipal government to another offering a different bundle of public activities more suited to their tastes. The responsibility of devising laws and institutions for all such governments was then left entirely to the states with no interference allowed from the federal government. For a long time, the US provided an archetypal example of these attitudes. Again India was an exception to this general pattern; the historical roots of its federal state were different and the constitution gave only limited specific rights to the states and reserved the residual bulk for the federal government.

The situation and outlook in federal states have changed for several reasons. The most important of these is the shift in attitudes of all nations towards an acceptance of a much greater public responsibility for citizen's welfare. Ever since the end of World War II and especially since the early 1960s, it has been accepted even in capitalist countries that alleviation of poverty, environmental hazards and blight and provision of minimal nutrition, requirements of primary health, education and sanitation are public responsibilities, no matter where they are needed. The exact bundle of goods and services to be provided differs from country to country and over time: but basically, there is no denying that a major part of these primary needs, such as, safe drinking water, sanitation, school education, slum improvement and removal of blight, care of the old, poor and children are either traditional municipal functions or are best carried out at that level. Therefore, a greater public commitment to these functions has automatically meant a tremendous increase in the responsibilities of municipal bodies.

Most of these functions like provision of education, water, and minimal nutrition involve large recurrent expenditure. For some functions, the need is often due to an increasing function of the size and density of the population to be served, e.g., sanitation or preventive health. For other functions, the liability of the providing public authority depends not so much on the size but on the composition of the population. A

concentration of poorer people in one locality, younger families, or old people create extra liabilities for the community for functions like education, school meals, care of the old, etc.

On the other hand, traditional municipal tax potential is not always a close positive function of those characteristics of local population, *viz.*, its size and particular composition which contribute most to the increase in municipal liabilities. The most common municipal tax is the one on houses and immovable property. Its receipts do not always respond closely to increases in population unless this also promotes adequate housing activity. Rather, it is not uncommon for property values to fall through an increasing concentration of poorer people in a locality. The same is true of local income and sales taxes if growing slums and crowded properties induce the better off people to move to other more congenial localities.

The upshot of all these factors is that municipal bodies everywhere have found it increasingly difficult to meet their revenue liabilities out of their own traditional sources of revenue. Left to themselves, municipal bodies have no way of keeping up with the growing requirements of or cleaning up of the backlog of deficiencies in civic services.

Although federal constitutions do not require federal government to take heed of such newly developing problems, federal government cannot deny their involvement in the issue. To start, with, public commitment to the policies of alleviating poverty, pollution and crime or meeting basic needs is generally accepted at the national level so that local failures in this matter are of national concern. It cannot be dismissed on the plea of local inefficiencies.

Moreover, these needs have been accepted as national priorities mainly because of the external effects and social costs of their non-provision. The total impact of these can be judged best at the national level. It does not take great imagination to appreciate the external costs of pollution or failure of disease control in one locality; but it is the same with local poverty, malnutrition, lack of education or basic sanitation because in the long run they weaken the physical and mental qualities of the nation's population. Moreover, disparities in the quality of life between sub-communities within a nation are liable to breed crime and unrest affecting the whole nation.

In fact, the basic assumption of traditional federal constitutions was that the characters of the several federating communities would be basically similar, varying within a narrow range around the national norm. There was no provision for correcting any glaring differences between them. This assumption no longer holds true in the large federations. A major diversifying factor is the fact that the pattern of urbanisation and the consequent municipal liabilities have developed in a highly uneven way. Each country has a few very large metro cities

or megalopolises and these house a concentration of all urban problems related with the size and complexity of population structures. The location or growth of these metro cities cannot be satisfactorily explained in terms of levels of local infrastructure or facilities, but is largely on account of natural physical advantages as well as national or global economic and social returns to the concentration of industrial, commercial and administrative activities in one location. Better municipal services may explain the growth of small residential communities, but their non-provision does not always act as a deterrent to the growth of metro cities if other advantages of concentration are overwhelmingly present. The control and promotion of most of the factors contributing to the development of these multiple activities in one location are beyond the jurisdiction of municipal bodies and can only be regulated, if at all, at the federal level.

This uneven spread of urban population and its consequent needs make it difficult for the federal governments to direct their aid for these activities through traditional channels. Over time, most federations had worked out a workable arrangement for passing on federal resources to the constituent states. Australia, for example, has a permanent Commonwealth Grants Commission, a quasi-judicial body for recommending the quantum of general purpose federal grants to each state. The commission has worked out a fairly satisfactory system of measuring the needs of each state in terms of the shortfall of its taxation and expenditure levels from the national average. Switzerland has an arrangement for both sharing tax revenues and giving matching grants to the lower level governments. In both these countries, the federal government spends not more than about a third of national public resources on federal activities. The rest is spent by state or local levels of government.

However, even in Australia, this arrangement is proving increasingly inadequate for dealing with urban problems and the federal government has had to switch to more and more specific purpose grants. Just between 1972-73 to 1974-75, the specific purpose grants to states from the federal government went up by 180 per cent as against general purpose grants which went up by only 26 per cent. The bulk of the increase was on account of urban needs—housing, health, urban and regional development. Even more remarkable was the fact that the federal government was giving increasing direct annual grants to urban local governments (5.8 million Australian dollars) in addition to those channelled to them through the state government (10.6 million Australian dollars).¹

¹Ursula K. Hicks, *Federalism: Failure and Success*, London, Macmillan, 1978, p.151.

These specific grants, especially direct grants to local bodies, have become necessary because no existing procedure of statewide grants can take account of urban problems which tend to get concentrated in several pockets. Channelling funds through state governments implies that the federal government meets the gaps in resources for functions that the states have selected. Unless municipal shortfalls in carrying out urban functions are fully reflected in the state budgetary position, the central grant giving authority does not have to consider it. On the other hand, even if it does so, the Australian standard procedure would only give it an average weightage, *i.e.*, to the extent of its difference from the national standard. And other states, with lesser fiscal problems, on behalf of municipal government may not appreciate it if only one or two states take up responsibility for urban problems and claim special assistance on those grounds. Therefore, general purpose grants channelled through normal federal to state machinery cannot possibly take account of the specific needs in specific urban areas so that direct special grants for functions to specific local bodies become unavoidable.

Giving such specific grants especially directly to local bodies, of course, immediately raises the hackles of lower level governments, since it erodes their autonomy by specifying the functions and standards that they are to take up. It also upsets their budgets when capital grants are given without making revenue grants for meeting the maintenance costs of assets created. Sub-national governments which do not get such grants are also resentful of the special treatment given to a select few.

To avoid these problems the US has tried to take away several important functions totally from the lower level governments and entrust them to federal semi-autonomous bodies who are to look after both the capital and revenue needs on those functions. The experiment has not been a great success in the US mainly because creation of such functional bodies means a total fragmentation of local administration and government. Most bodies for such functions as water supply, sanitation, roads, housing, slum improvement share the same areas and jurisdiction and these artificial barriers between functional authorities lead to a lack of coordination and wastage, bottlenecks, etc.

Even more important, even federally sponsored local functional bodies or specific-purpose grants to local bodies can do little about the structure of urban settlements. They too have no control over population movements or location of activities. So, the aid becomes open-ended and gets used in resolving one crisis after another rather than in tackling the roots of the problem. If, for example, in a specially poor area, an authority is created for special assistance to poor, more and more such people move into the area with the result that none of the programmes ever really achieve any real relief from a given problem.

The reason why federal intervention is necessary in tackling such basic problems is that they can try more fundamental remedies.

THE INDIAN SITUATION

The ramifications of this problem of devising appropriate fiscal relations between different levels of government are somewhat special in the Indian situation mainly because the Indian fiscal traditions do not conform to the general federal pattern. As mentioned before, the Indian constitution allots to the federating states only limited specific powers and responsibilities and reserves the residual bulk for the federal government. The central government is fiscally in a much stronger position than the states: even after transferring to the latter resources up to about 40 per cent of their total receipts (1979-80) by way of tax shares, grants and loans, the direct annual expenditure of the Government of India (net of such transfers) is still significantly greater than that of all the state governments taken together. Although none of the state governments have been successful in fully exploiting their powers to levy either the agricultural income tax or land revenue, their revenue receipts from their own sources have increased as fast as those of the centre during the decade 1969-70 to 1979-80. Nevertheless, their financial position is becoming increasingly critical as indicated by the frequent resort to overdrafts by many of them in recent years. This is mainly because the constitutional allotment of functions between these two levels of government places most of the burden of providing social and economic services on the state governments. Several of these functions have, in turn, been traditionally given to municipal bodies who also are increasingly hard-pressed to meet their own resultant liabilities.

Another distinct characteristics of the Indian fiscal tradition is the wide divergence between the regions in the role of municipal governments. In the western part of the country, municipal governments have always been more or less self-sufficient, finding both revenue and capital funds for their activities by their own devices. In the south, they rely on shares in state taxes for a part of their revenue receipts and on the state governments for funds for capital works. In the eastern region, municipal bodies are dependent on mostly *ad-hoc* state grants for the bulk of their resources. Similarly, while in northern and western India, octroi is a mainstay of all such bodies, the southern municipalities do not generally levy any form of sales taxes; in West Bengal, the use of a local entry tax is a fairly recent development.

Between each of these regions, and equally within each of them, the level of civic services varies so widely that there is no possible hope of equalising standards or even bringing all to a basic minimal level in the near future. These wide differences, moreover, are not necessarily syste-

matic between large and small, newer and older urban settlements. Even at the time of independence there was this problem and since then various cities and towns have grown at different paces and aggravated it further.

Indeed the Indian pattern of urbanisation in the last thirty years has been remarkably lop-sided. Urban population is increasingly being concentrated in the large cities of a million and over. By 1971 their share in the total urban population had grown from 41 per cent in 1951 to just over a half. In contrast, the share of small towns—those with population below 20,000—had fallen from 30 per cent in 1951 to 18 per cent in 1971. Many of the small towns had stopped growing or lost population to the bigger cities. Also not all big cities grew equally fast. Those of West Bengal grew by only 50 per cent between 1961 to 1971, while those of Andhra Pradesh grew by over 200 per cent. While West Bengal's small towns did worse than elsewhere, Calcutta remained the largest city region of India.

In absolute size, India has some of the world's largest cities and their civic problems are also on a gigantic scale. At the end of the seventies decade, nearly half of the population of Bombay city and over a quarter of that of metropolitan Calcutta were in slums and squatter colonies. The same problem haunts all the large and fast growing cities like Pune, Madras, Hyderabad. Sanitation and safe drinking water are woefully inadequate so that malaria and enteric diseases are becoming endemic everywhere. Because of the appalling low incomes of a large section of the informally employed population, malnutrition is widespread. The general level of skills and education, even primary education are, if anything, declining because of widespread use of child labour and inadequate educational facilities. Fast growing concentration of population is extremely onerous for municipal bodies because while the need for civic services grows faster than the population, their resource base does not respond equally fast. Population growth is not always matched by growth of municipal resources, especially since housing activity, which forms the basis of municipal property tax, is not expanding fast anywhere. The social costs of such enormous concentration of malnutrition, disease, sub-human living and ignorance cannot but be appalling and must affect the entire nation. The problem, however, has received no serious and consistent attention at the national level so far, partly because of the generally low level of development of the country, but also because the urban population, however vocal, still forms less than a quarter of India's total population.

The federal government, however, can no longer ignore this problem. After all, as a custodian of all residual responsibilities, it is committed to attend to all newly developing problems. Resources of all other levels of government are fully committed to their existing functions and there is no scope for them to extend their sphere of activities to additional func-

tions or resources. Also, in the Indian traditions, the general authority for long term policy of development has been highly centralised through the institutions for planning as well as for funding and allocating internal and external extra-budgetary resources.

Secondly, the federal government cannot deny the fact that the bulk of its tax resources are collected from urban areas, as shown in Table 1:

TABLE 1 SHARE OF CENTRAL TAXES FROM URBAN AREAS

(Rs. in Crores)

Year	Central Receipts*			Urban Yield*	Total Yield	Percentage
	Income Taxes	Indirect Taxes	Total Taxes	of Central Indirect Taxes	of various Central Taxes from Urban Areas	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1979-80	4397	7483	11963	2806	7203	60

*Gross of States' share in tax receipts.

NOTE: The Report of the Committee on Indirect Taxes (Jha Committee, GOI, 1977) estimated for 1973-74 that the average per capita incidence of central indirect taxes was Rs. 4.99 in rural areas and 12.03 in urban areas. The 1973-74 Indian urban and rural population was estimated on the basis of 1971-81 trends. This indicated that urban areas yielded 3/8th of total receipts of central indirect taxes. For 1979-80, the gross central indirect tax receipts were divided in the same proportions.

Hitherto central aid has reached the municipal bodies and met their needs in four ways:

1. Through special central departmental non-plan schemes such as the housing and slum improvement grants to CMD in the 60s. This type of aid has now been more or less discontinued.
2. In its place, central government has allotted finances for plan schemes in this field. These allocations, however, are extremely small compared to the total national plan outlay.
3. These plan allocations include provision of some equity capital to bodies like the HUDCO which are supposed to raise further market loans on that basis and also rechannel their recoveries from older loans into new housing projects. These schemes are meant to be economically viable though on very easy terms.
4. Tax shares and grants are allotted as revenue transfers as per recommendation of the Finance Commission. Although these accounted

for over a quarter of the central gross revenue receipts in 1979-80, there is no guarantee that any of these will be allotted to municipal governments. Only 10 per cent of income tax and excise tax receipts are allocated on the basis of some measure of collection. The rest as well as the grants go to 'needy' states. The need is judged mainly on the basis of population and budgetary deficits. No weightage is generally given specifically to urban problems or needs of municipal bodies (Table 2).

TABLE 2 PLAN ALLOTMENTS TO FUNCTIONS

(Rs. Crores)

Plan Years		Urban Development Functions		
		Urban Development	Urban Housing	Urban Water Supply and Sewerage
Fifth plan	1974/79	505.56 (1.29)	542.92 (1.39)	539.00 (1.37)
Sixth plan	1978/83	752.00 (1.06)	1038.00 (1.46)	815.00 (1.15)

NOTE: Figures in brackets are percentages to total plan outlay in the 5th and 6th plans respectively.

The present arrangement means that revenue budget needs of municipal bodies can be considered by the Finance Commission only if the state governments have already committed themselves to assist them and this is reflected in their projected recurrent resource gap. This, as we mentioned before, is not a universal practice in India and most states accept no responsibility to cover municipal revenue budget gap. Therefore, while some municipal bodies may get central resources through this channel, others may not. The end result is *ad hoc* and highly arbitrary. Same is true of general transfers to states by the centre. Unless the state governments commit themselves to some urban function, none of the central resources would reach them.

For the federal government to concern itself with budgetary difficulties of municipal bodies is difficult because their budgetary deficits may arise due to: (a) genuine imbalance between the powers and functions allotted to them by each state, or (b) differences in standards of services, or (c) differences in tax collection and other administrative efficiency. A Finance Commission appointed for a limited period has no time to go into these issues and unless pressed by the state governments, it does not have any reason to do so either.

Nevertheless, if the federal government is concerned with the financial problems of municipal governments, as it should be, then it should

encourage all state governments, no matter what their traditions, to take more direct continuous interest in municipal budgets and assess through time their needs for both developing and maintaining civic services. These can then be reviewed separately from time to time in the light of national priorities by the Planning Commission as well as the Finance Commissions. The inducement to the state governments to take up this exercise could be through offers of special assistance perhaps on a matching basis for such programmes. Although it may take time to arrive at a truly rational arrangement, an immediate offer to states of an added share of income and excise taxes on the basis of collection could be made with the stipulation that it be passed on to urban areas for genuine revenue gaps as assessed by respective state governments.

Another issue deserves serious consideration of the central government. For some time now it has been pressing the state governments to abolish octroi and replace it by suitable state collected taxes whose receipts would be passed on to the municipalities. Octroi has been a major factor in enabling those municipal bodies which levy it to be self-sufficient and its receipts have always been totally devoted to strictly urban priorities. If it is replaced by any state tax, it will be sharing the same base as other taxes of higher level governments. And in the pushes and pulls of the latter's commitments to more diverse issues, urban problems may get relegated to the background.

The issue of autonomy is important for Indian municipal bodies not just for their dignity or self-respect, but also for their sheer ability to stand on their ground and pursue urban functions in face of conflicting needs. However, the claims of genuine urban needs get diluted by the time they reach the central government through the states, due to differing perceptions of needs by the municipal and state governments. Therefore, the possibility suggests itself for municipal bodies to be used as line agencies of the federal government for its various policy measures for urban problems. In the Sixth Plan, the minimum needs programme had such a component and its urban elements—primary education, slum improvement, water supply and child nutrition—could very well be municipal functions. The programme was not always handed over to them, although there were no other established agencies to carry them out.

Apart from the minimum needs programme, the central government does make several sectoral allocations which benefit urban areas. The most important of these is probably the food subsidies which amounted to Rs. 650 crores in 1980-81. For many of these sectoral plans execution would be more effective if these are entrusted to municipal bodies. A diverse set of programme for which resources are provided by other levels of government would give municipal bodies a more convincing

profile and they would have a genuine interest in seeing that the funds get used in time in their areas.

CONCLUSION

The general concern of federal countries for devising appropriate machinery for transfer of resources from federal to municipal governments is as yet not shared by India. This is not because there is no need for it; the Indian problem is, if anything, even more complex and urgent. However, the urgency gets diluted because so far there is not enough work done on the problem of social costs of urban deficiencies to convince the authorities of their urgency even in face of the general crisis situation in India. In view of the multiple priorities and genuine resource shortage of the state governments, it would be better if federal allocations for urban problems, as and when they are made, should be channelled not through the state governments, but directly to municipal bodies as line agencies. □

State-Municipal Financial Relations in West Bengal

BHABATOSH DATTA

URBAN MUNICIPAL administration in the old Bengal Presidency area has had a long history starting with the establishment of the Corporation of Calcutta in 1726. Local Committees for other towns were provided for under Bengal Act X of 1842 and there were further laws in 1850, 1856 and 1864, followed by the District Towns Act of 1868. This last legislation gave an impetus to the formation of municipalities in the district towns. It is interesting to note that of the 111 municipalities in West Bengal (including Uluberia which has just been formed), as many as 26 were established in 1869-70 and that there are 46 municipalities in West Bengal now which are more than a century old.

There had been since the passing of the Comprehensive Municipal Act of 1884 a series of amending laws, culminating in the Bengal Municipal Act, 1932, which has been the basic law for urban bodies for half a century. The law governing the Corporation of Calcutta has also gone through major changes. In 1980, the Government of West Bengal enacted a new law for the Corporation of Calcutta and detailed amendments of the Municipal Act of 1932. These new laws are still to be made operative, but the process of implementation has started.

Of the 111 urban municipal bodies in West Bengal now, two are Corporations (Calcutta and Chandannagar), six are Notified Area Authorities and four are Town Committees, the rest being designated as municipalities. Howrah will soon become a Corporation under a new law. The Chandannagar Corporation is a relic of its past historical link with France. The Town Committees are all in the Cooch Behar district which was formerly a princely state. The Notified Area Authorities function in a few newly-developed government-sponsored or industrial townships. Seven of the municipalities have been established since 1980 and they are presently almost fully financed by government grants.

There is extreme disparity—in terms of area, population and revenue expenditure—among the municipal bodies. The total population of all

the municipal areas in 1981 was 115.54 lakhs, of which 32.92 lakhs or 28 per cent belonged to Calcutta. The other CMD (Calcutta Metropolitan District) municipalities had 42 per cent of the total and all other non-CMD municipalities together the remaining 30 per cent. There were in 1971 three municipalities with a population of less than 5000 each. The increase in 1981 has eliminated this category, but there are still six municipalities in the population range between 5,000 and 9,999, 13 in the range 10,000-19,999 and 29 in the range 20,000-49,999.

There was a rapid increase in the population of the smaller towns in the post-Independence years—partly because of the usual village-to-town migration and partly (often mainly) because of the inflow and settlement of refugees from East Pakistan. The average annual growth rates of population in the CMD municipalities other than Calcutta and Howrah were 4.4 per cent, 3.8 per cent and 3.14 per cent in the decades 1951-61, 1961-71 and 1971-81 respectively. The corresponding rates of growth in the non-CMD municipalities (excluding Town Committees) were 4.0 per cent, 3.8 per cent and 3.9 per cent. But the rates of growth in Calcutta were only 0.8 per cent, 0.8 per cent and 0.45 per cent while in Howrah they were 1.8 per cent, 4.4 per cent and 0.05 per cent.

In terms of geographical area, there is the sprawling Durgapur Notified Area at the top with its 154 square kilometers; Calcutta coming next with 104 sq. km. At the other end, there are very small municipalities with areas of 3 or 4 sq. km. only; the smallest is Toofanganj in Cooch Behar with an area of 0.88 sq. km. It is necessary to note that the smallest municipalities are not all located in the outlying semi-rural areas. Some of them are in the close neighbourhood of Calcutta, where very small, but densely populated townships constitute a contiguous cluster of zealously guarded separate municipalities. All these are now covered by the CMDA (Calcutta Metropolitan Development Authority), which includes within its field of operation substantial non-municipal and rural areas also.¹

THE FINANCIAL PICTURE

The general financial picture of the municipal bodies in West Bengal has been one of poor exploitation of the property tax, negligible utilisation of the powers to levy other taxes and fees, inadequate action to raise non-tax revenues and, consequently, increasing dependence on transfers and grants from the state government. Between 1975-76 and 1978-79, such grants and transfers as a share of the total income of all municipal bodies in the state increased from 36 per cent to 42 per cent.

¹West Bengal Municipal Finance Commission (WBMFC), *Report*, 1982, pp. 15-17, 205-207.

There is also the fact that there are sharp differences in the per capita revenue income. In 1978-79, there were six municipalities with a per capita revenue income of less than Rs. 15 per year and another six at the other end of the scale with an annual per capita revenue income of Rs. 50 and above.²

In their own *internal* revenue (leaving out grants and other transfers from the government), sources other than the property tax have been of small importance, constituting less than 30 per cent of the total receipts. Taxes other than the property tax—on carriages and animals, on professions, trades and callings, on carts, on advertisements, etc., have yielded only 7 per cent of the total revenue. Similarly, non-tax revenues (rents from markets, slaughter-houses and dhobi-khanas, licence fees, etc.) have also been unimportant. The receipts from property tax have grown, but the rate of growth has been much slower than that of revenue expenditure, which has increased by between 15 and 17 per cent per year in recent years.³

Transfers from the state government comprise the assigned share of the receipts from the 1972 entry tax, a share of the motor vehicles tax receipts, subventions, general grants-in-aid and a variety of occasional specific purpose grants. The net receipts from the 1972 entry tax are distributed among the CMDA, the Calcutta Corporation, the other CMD municipalities and the non-CMD municipalities in the proportion of 50 : 25 : 17 : 8, the shares of the individual bodies within the last two groups being based on population. The most important subvention is the compensation for dearness allowances, the state government having accepted the liability of meeting 80 per cent of the additional expenditure on this account and also the policy that the employees of the local bodies would get dearness allowance at the same rates as are given to the state government employees. In 1978-79, of the total transfer of Rs. 19.74 crores from the state government to the municipal bodies, as much as Rs. 10.15 crores was subvention for dearness allowance, while the transfer from the entry tax receipts amounted to Rs. 7.38 crores and that from the Motor Vehicles Tax to a little less than Rs. 1 crore.⁴

An important feature of the recent years has been the grant of substantial ways and means advances to some municipalities. Such advances should not be carried from one year to the next, but in the case of Howrah in particular, there was, for a number of years, an annual ways and means advance of about Rs. 1.20 crores. The main reason why this was necessary was that a particular re-assessment was held up by a court injunction. Ways and means advances are also necessary for new

²WBMFC, *Report, op. cit.*, pp. 52-60.

³*Ibid*, p. 69 and Table 6.13.

⁴*Ibid*, pp. 17, 70.

municipalities and occasionally for others. The total short-term debts of the municipal bodies to the government would not have been large if it were not for the special case of Howrah.

On the other hand, the long-term debts of the municipal bodies are substantial. At the end of 1979-80, the Calcutta Corporation had a total outstanding debt of Rs. 15.44 crores, of which Rs. 5.49 crores was due to the CMDA, Rs. 4.45 crores to the central government and Rs. 4.49 crores to the state government. In the main, the loans were meant to finance water-supply, drainage and conservancy schemes. All the other municipal bodies had, at the end of 1978-79, a total debt liability of Rs. 8.46 crores of which Howrah alone accounted for Rs. 6.12 crores. Repayments have been tardy and the interest due is either carried forward or is paid from government grants-in-aid.⁵

MUNICIPAL FINANCE COMMISSION 1980-82

This is the background on which the Municipal Finance Commission of 1980-82 was expected to work: municipal bodies, very large and very small, all dependent on government transfers and grants; a complex variety of grants-in-aid depending on piecemeal annual decisions, large ways and means advances in some cases; a dead-weight debt-burden; and above all, despite substantial increases in revenue expenditure, stagnation at a low level of municipal services. There was also the fact that the municipal authorities had been superseded in a very large number of cases (including Calcutta), but there was no improvement in administrative and financial management. A major reason was that in most cases outside Calcutta, the full powers of the elected bodies and the chairman were vested in an administrator, who often had other duties to perform. The situation had become extremely complex by 1979. The newly-elected bodies came in a year later, but they were new to their task. It had become imperative to place the state-municipal financial arrangements on a firm footing.

The West Bengal Municipal Finance Commission (WBMFC), appointed on 6 December, 1979, was given terms of reference largely similar to those generally included in the Government of India order on the Finance Commissions appointed under Article 280 of the Constitution, with one major difference.⁶ By a convention adopted from the time of

⁵WBMFC, *Report, op. cit.*, p. 150.

⁶The Commission at the final stage consisted of Dr. Bhabatosh Datta, Chairman; Professor Abhijit Datta (Indian Institute of Public Administration, New Delhi), Shrimati Nirmala Banerjee (Centre of Studies in Social Sciences, Calcutta), Shri R.M. Kapoor (Times Research Foundation), Shri M.G. Kuty (Chief Executive Officer, CMDA) and Shri Kalyan Biswas (Secretary, Industrial Reconstruction Department, (Continued on next page)

the Second Finance Commission (1956-57), Plan expenditure has been kept out of the purview of Finance Commissions. The West Bengal Municipal Finance Commission was asked to go into the entire problem covering all finance, revenue and capital, Plan and non-Plan. In addition, it was asked to make recommendations on some ancillary issues like the re-drawing of municipal boundaries. In the main, the Commission was asked to make recommendations on the following matters:

- (a) Determination of the projected gap between revenue receipts (non-plan/non-developmental) of municipal bodies in the state during the period from 1980-81 to 1983-84;
- (b) Measures which may be taken by the municipalities themselves to bridge or reduce the projected revenue gap indicated in (a) above, and the extent to which the revenue gap can be bridged or reduced by such measures;
- (c) In the context of measures proposed in (b) above, the quantum of financial assistance from the state government to the municipal bodies needed to bridge or reduce the residual revenue gap;
- (d) In the context of measures proposed in (b) above, the quantum of financial assistance from the state government to the municipal bodies, including *inter alia*: (i) grant-in-aid (specific/matching/general), (ii) tax-sharing, and (iii) vesting of new tax/non-tax revenue sources in the municipal bodies by the state government;
- (e) Measures needed to tackle the debt problems of municipal bodies and ensure the proper administration of the capital account, including *inter alia*, (i) review of the outstanding debt position of the municipal bodies, (ii) principles and procedures to regulate the borrowing powers of municipal bodies, and (iii) steps needed to eliminate the need for regular ways and means advances to the municipal bodies;
- (f) The desirable dimensions, patterns, principles and procedures of developmental/plan assistance from the state government to the municipal bodies during the period 1980-81 to 1983-84; and
- (g) Changes, if any, needed in the fiscal relationship between the municipal bodies in the urban local areas of the state and the improvement trusts/development authorities in such areas, and the desirable scheme or pattern of these relationships.

(Continued from previous page)

Government of West Bengal) Member-Secretary. Shri Kutty was ill at the time the Report was signed. He later wrote a letter (reproduced in the Report) expressing his differences in regard to the recommendation regarding the Madhya Pradesh type of Entry Tax and the treatment of the relations of municipal bodies with urban development authorities,

On its own initiative, the Commission extended the period covered from 1983-84 to 1985-86, because by the time the Report was completed it was the end of the fiscal year 1981-82. The Commission held its first meeting on January 10, 1980 and its final meeting on March 29, 1982, submitting its Report on the following day. The major task of the Commission on the initial months was to collect full data about finances, levels of services, etc., for each one of the bodies with the help of detailed schedules. It was here that the Commission faced its greatest difficulty. Accounts were not kept properly by many of the bodies, audit was woefully delayed and long-standing audit objections had remained unanswered. Many of the bodies, including the Calcutta Corporation, were unable to provide the detailed data required for evaluating and comparing the levels of services. The records supposed to be collected by the Local Bodies Directorate of the government were found to be inadequate and incomplete. The commission had to persuade and cajole the municipal bodies for responding to the inquiries and, in a large number of cases, had to send its own staff for compiling the schedules from the disarrayed crude data to be hunted out from the office shelves.

The data on which the WBMFC has based its analysis and recommendations will, it is hoped, be checked by later investigators. The Commission has felt that it has given a start to a process of data compilation which can be and will be improved. It has also felt that, despite inadequacies, the basic financial data collected are by and large dependable and, therefore, financial recommendations can be made with such data as the base. The commission has expressed its firm belief that municipal finance commissions will be appointed at intervals of not more than five years. The inadequacies of the first commission will in that case be largely rectified later.

THE APPROACH

The Commission had to define for itself its basic lines of approaching the problem of municipal finance.⁷ These have been put in the Report as 'postulates', the first of which is that it is "socially desirable to assign to the local authorities all services and other functions which are clearly identifiable as local". Once this has been done—by statute or by government order—there should be adequate powers and finance for the proper performance of the functions. The commission has recognised that the local authorities are close to the people and can, therefore, involve the residents in the performance of civic functions. The logic of a federal system as applicable to the union and the states is largely the logic for state-municipal relations also.

⁷WBMFC, *Report, op. cit.*, Ch. IX, esp. pp. 111-12.

The second postulate is that "as long as local bodies discharge their functions adequately and efficiently, they should be given the necessary measure of autonomy". The government must not interfere unless there is any clear evidence of inefficiency or abuse of power. The government has, of course, to play an important role when there are services of a trans-municipal character. This is particularly important in the CMDA area, where there are small contiguous municipalities, offering scope for economies of scale in the performance of functions of a capital intensive nature, like the supply of water. The justification for the CMDA arises from this consideration, but this does not preclude collaboration within shorter limits between two or three municipalities—voluntary or government-sponsored—in the provision of appropriate services.

Developmental activities in a municipal area would comprise, first, activities undertaken by the municipality itself; secondly, activities undertaken by a cluster of municipalities of which it is a part; thirdly, activities undertaken by special trans-municipal organisations like the CMDA or by the government directly; fourthly, activities undertaken by the municipality under the direct sponsorship of the state government (or the union government); and finally, activities of special infra-municipal improvement agencies like the Improvement Trusts in Calcutta and Howrah. A good example of central government investment in an urban area is the Calcutta Metropolitan Railway, for which the Calcutta Corporation bears no financial responsibility, but which, when completed, will not only provide direct benefit to the residents but also should improve municipal revenues through a rise in property values. There may be some increase in municipal expenditure also.

In regard to finance, the Commission has laid down a few 'fundamental' principles of policy. First, the municipal bodies "must themselves utilise as fully as practicable all the financial powers given to them" including taxation, licensing and the raising of non-tax revenues. Secondly, "when the function to be discharged by the municipal bodies cannot be fully financed by their own resources, despite their best efforts, the government has to come in". The Commission has outlined two main responsibilities for the government: the financial assistance necessary must "not only be forthcoming, but it should be assured", and the state government has a special responsibility for raising the levels of services in the municipalities which have not been able to reach a desirable standard.

The second principle relates to the treatment to be accorded to the 'deficits'. The centre-state Finance Commissions have generally adopted a 'gap-filling' approach in determining the amounts of transfers to the states. The non-Plan gaps are estimated after careful scrutiny and application of trend rates, and then the shares of the divisible taxes are allocated. If there is any deficit remaining unfilled, equivalent grants are

awarded under Article 275 of the Constitution. The state-municipal financial problems are more complex because of the very large number of bodies with widely divergent financial requirements and also because it is not easy to devise any common formula for grants-in-aid which would be satisfactory to the majority of the units. There is then the major defect of the gap-filling approach, namely, that it may penalise those municipalities which have been managing their finances efficiently and relief, or even reward, to the cases of poor financial administration. In fact, the assurance that the gaps would be filled-up may take away all incentives for good management.

It is, however, difficult to prescribe a system of rewards and penalties. While additional grants can be recommended for good performance, by linking the grants, at least partially, with increases in internal revenue yields, a system of direct penalties for failure to reach the standard is unpractical. Besides, any penal measure ultimately affects the level of services and thus penalises the residents. The Commission has, therefore, decided to approach the problem indirectly by assuming certain standard rates of growth for both revenue and expenditure before estimating the deficits. This would normally mean that the municipal bodies unable to raise their revenues at the standard rates or to keep the growth of their expenditure below the rates set down would find the transfers from the state government inadequate. It is realised that there may be difficulties in particular cases and the Commission has, therefore, recommended that every such case will have to be presented to the state government for special grants and that such additional grants should be made only if the government is satisfied that there have been special factors impeding the attainment of the desired position. In effect, the municipal bodies will be under notice that they must attain the prescribed floor rates for revenue yields and not exceed the ceiling rates for expenditure.

Another problem is that of compensating the municipalities for the increases in expenditure caused by inflationary pressures. It is again difficult to devise a suitable system of inflation-indexing of transfers, particularly when such indexing does not operate all over the system. The Commission has, however, noted that the most direct impact of inflation has been on the dearness allowances payable. The Commission has included all the dearness allowances up to 1980-81 in the calculation of expenditure and deficits and has recommended that all further dearness allowances should be financed by the state government in the form of additional subventions.

Finally, there is the problem of financing those services which a particular municipality may perform as an agent of the state government. Many of the municipalities run primary schools alongside those maintained by the government. The Commission has felt that all funds

required for primary schools in municipal areas (as in other areas) should be specially provided by the government. It is the constitutional responsibility of the government (union and state) to provide free and universal elementary education upto the age of fourteen. A similar case can be made out for any agency function in the field of health services performed by a municipality.

The transfers and grants referred to above do not include Plan grants. One of the most important tasks of the government is to ensure that the level of services in the backward municipalities rises. This means developmental capital expenditure and it forms part of the Plan estimates for the state as a whole. Plan grants, it is proposed, should be based on the projects finalised in consultation with the municipal bodies and trans-municipal agencies and should be separately made project by project. This will be discussed in a later section more fully.

THE PROPERTY TAX

Any scheme of municipal finances must start with an examination of the prospects of increased revenue from the most important internal source, the property tax. The Commission requested the National Institute of Public Finance and Policy, New Delhi (NIPFP) to make a full study of the property tax in West Bengal on the basis of data collected by the Commission and additional information collected by the Study Team. The report of the Study Team has been published as Supplementary Volume II of the MFC Report. The Commission has not accepted all the recommendations of the Study Team, but its own analysis and approach are largely based on the Team's findings.⁸

The Study Team has found that the growth rate and the elasticity of the property tax receipts (at constant prices) *vis-a-vis* such variables as population, cost of construction, or the non-agricultural gross domestic product have been low in West Bengal (especially Calcutta) as compared with the other major states and cities in India. The collection rate has often been poor. Some of the smaller municipalities show a fairly high ratio between current collection and current demand, but in their case the amounts annually collected are mostly spent-up in paying the salaries of the collecting staff.

It is not necessary here to go into the details of the property tax system in Calcutta and in the other bodies. The most important question before the Commission was that of reforming the system and also improving assessment and collection. The Commission has examined thoroughly the alternatives to the annual rental value (ARV) as the base of the property tax. It has rejected the alternatives of a 'capital value

base' and a 'site value base' mainly on the ground that in India there is practically no open real property market. Comparison of either capital or site values is rendered difficult sometimes by the absolute lack of relevant information and almost always by the understatement of values in the registration documents. The whole question will be begged if an imputed rental value is used to determine the site or capital value. The legal problems of fixing rates of site value tax high enough to bring in adequate revenue may be difficult. The Commission has also noted that "the allocative effects of differential capital value taxation are not likely to go far in India and particularly in the West Bengal municipalities where investment decisions depend on a multitude of factors among which property taxation is a minor one". The Commission has not also been convinced by the argument that a site-value or capital-value base would lead to a better utilisation of urban land. There are the questions of "inequitous burdens of the relatively poor holders of old properties with high unrealised capital values".⁹

The Commission has gone in detail into the proposal for a composite base for property taxation, involving the combination of a number of variables added together with specific weights or 'points' attached to them. There are distinct administrative advantages in a point system, both at the assessment and re-assessment stages. The main question is that of choosing the variables and determining the weights—particularly in a city like Calcutta, where the number of zones (and sub-zones)—one of the major variables—will have to be very large on account of the heterogeneous pattern of the holdings. The Commission has concluded that "differences in the variables or the characteristics do not necessarily indicate differences in taxable capacity". The question of poor owners in a rich locality is not simply a question of better land-use (through compelling the highly-taxed poor holders to sell out), but a human social problem.

The proposal for by-passing the rent control laws may not be legally sustainable. It is realised that rent control affects new investment, proper maintenance of existing property and also municipal revenues. It is also true that the beneficiaries of rent control are not always really poor. But a complete elimination of rent control will not be socially acceptable and justifiable. The laws can, however, be changed to exclude from their operation all new property and extensions, all non-residential property and also all property with a valuation above a specified limit.

The Commission has recommended the continuation of the ARV base, in the expectation that the guidelines prepared by the newly-constituted central valuation board (CVB) will improve both assessment and collection. The supervisory and appellate powers of the Board should bring

⁹WBMFC, *Report, op. cit.*, pp. 98-100.

more justice and efficiency to the system. Besides, as in the case of some other proposals, the Commission has emphasised the fact that its terms of reference require it to make recommendations for the next five years. It has, therefore, to consider only those reforms which appear practicable within the period. The Commission has felt that further studies should be made in the light of the experience of the coming years.

The question of rate-structure has also been examined. The new Calcutta Municipal Act (1980) has replaced the 'step' system of the property tax rates by a 'straight-line' system. Under the former the rate increases step by step within a range set by a minimum and a maximum. As there is no marginal relief, the amount of tax payable shows a sudden jump when the ARV moves up from one step to another, and particularly from near the top of one step to near the bottom of the next. Under the new system the *percentage rate* of the tax will be equal to a "constant-plus-a-fraction-of-the-ARV", subject to a minimum and a maximum. The actual parameters chosen are 10 for the constant and $1/600$ or 0.00167 for the fraction and the minimum and maximum rates adopted are 11 per cent and 40 per cent. It will be noted that the straight line equation for the *percentage rate* yields a quadratic for the *amount* of the tax, which increases at a continuously progressive rate, until the *tax rate* reaches 40 per cent. After that limit, the *amount* of the tax increases at a constant rate.¹⁰

The Commission has shown that the new system will mean lower taxes for valuations of Rs. 7,000 or less and somewhat higher amounts above that. The difference is not very substantial and one could have devised a step system (with marginal relief) which is arithmetically a near-equivalent of the adopted straight line system. However, continuous progression is an advantage and the taxes at higher ARV levels are at present relatively low. The Commission has suggested that the new scheme should be tried in Calcutta and the experience gained will be useful in determining whether it should be extended to the other municipal areas. The Commission has found no logic in prescribing a new system in Calcutta and the continuation of the old system elsewhere (including neighbouring Howrah) especially when all the relevant laws have been changed at nearly the same time.

OTHER TAXES AND NON-TAX REVENUES

It has already been noted that the municipal revenues from other

¹⁰The rate is $(10 + \frac{\text{ARV}}{600})$ per cent, ($\geq 11, \leq 40$) The amount of the tax will be $(10 + \frac{\text{ARV}}{600}) \cdot \frac{\text{ARV}}{100}$, or $\frac{\text{ARV}}{10} + \frac{(\text{ARV})^2}{60,000}$ (WBMFC, Report, p. 97) also Tables 7,12,

taxes and from non-tax sources are very low. The Commission has recommended the adoption of the profession tax by municipalities, after suitable amendments to the relevant laws. Collection should be easy, particularly when the required information can be gathered from the state government. The new municipal laws empower the municipalities to charge commercial rates for municipal services (including water-supply) from non-residential property. The question of 'metering' all water-supplies has been found impracticable in the case of residential properties. The scope for remunerative municipal enterprises appears limited, but some increase in revenues should be possible through market development. The Calcutta Corporation has large block of unutilised land under its direct ownership and in the long run it should be possible to derive incomes from such land through sales, leases, or construction of rentable buildings.

THE REVENUE GAPS

There are many other miscellaneous recommendations on the revenue side, relating to government property, slums, vacant lands, etc., and also regarding assessment administration, including provision for self-assessment in the case of high-valued properties and new constructions. Taking all the facts and practicable changes together, it has been recognised by the Commission that substantial changes in the schemes and operation of the revenue sources will take time and will not be effective within the period covered by its recommendations. It has, therefore, proceeded on the assumption that the 'own' revenues of the municipal bodies will grow at the rate of 10 per cent per year, subsuming within this the trend rate of increase as well as increases on account of improvement in assessment and collection at the existing tax rates and of feasible changes in the rates and coverage. On the expenditure side, the revenue-budget expenditure has been assumed to increase annually by 5 per cent for salaries and wages and 10 per cent for all other items. Dearness allowances up to 1980-81 are included in the expenditure base on which the rate of growth is applied. There will be some saving of expenditure also because of the reduction of interest dues on the cancelled debts.

On this basis, the revenue-budget gaps (before any transfer from the state government) has been calculated for each one of the municipal bodies for each of the years from 1981-82 to 1985-86. The calculations have shown a total resource gap of Rs. 41.37 crores for all municipalities in 1982-83 (Calcutta Rs. 22.08 crore, Howrah Rs. 5.14 crore, other CMD municipalities Rs. 7.85 crore and non-CMD municipalities Rs. 6.30 crore). The total will rise to Rs. 46.35 crores in 1985-86 indicating an overall increase of 12.04 per cent, the maximum increase being 20.23

per cent for Howrah and the minimum 8.38 per cent for Calcutta. The next question is that of meeting the requirements.¹¹

This could be done by extending the role of tax-sharing and/or by increased grants. The Commission has taken the view that the complex variety of grant should be replaced by a few major ones and that the dependence on *ad hoc* grants should be reduced, if not eliminated. Grants give the state government greater supervisory control but that is exactly the reason why they should be reduced, if local government is to be made meaningful. Grants also involve a large element of discretion and there have been complaints of unequal treatment of equally needy municipalities. Besides, expenditure may increase in some municipalities simply because the authorities feel certain about re-imbursement through grants. Tax-shares, on the other hand, will make the municipalities independent of any need for lobbying, will provide some buoyancy to the revenues and will also make the municipalities actively interested in the state government's taxation policy. While some grants will be unavoidable, the Commission has sought to minimise them.

TAX SHARING

The next question is about the taxes to be shared. The 1972 Entry Tax is already shared and so is the Motor Vehicles Tax. The 1972 Entry Tax now applies only to goods entering the CMD area. The Commission has felt that there is a good case for extending the tax to a few other centres like Asansol-Raniganj, Siliguri and Haldia. The scope for a further widening of the Entry Tax has also been examined in the light of the systems operating in Madhya Pradesh and in Karnataka. In both these states, all municipal areas are defined as 'local areas'. The Karnataka tax is levied on a few selected commodities only; the original list comprising only those goods on which the Centre levies 'additional excise in lieu of sales tax'. The Commission has felt that if the scope of the entry tax is to be geographically widened, it should be of the Madhya Pradesh type with a large list of commodities liable to pay the taxes. The state government will be the taxing and collecting authority. The Commission has not found the Gujarat or Maharashtra method of leaving the collection of octroi to the municipalities suitable for adoption in West Bengal.

It is realised that the legislation required to introduce the Madhya Pradesh type of entry tax or octroi in West Bengal will require time. It is, therefore, recommended that during the ensuing five-year period, or pending the introduction of an all-municipalities entry tax, the divisible pool should be increased by including the receipts from an earlier tax—

¹¹WBMFC, *Report, op. cit.*, p. 120, Table 10.4.

the 1955 entry tax on tea, jute and fruits entering Calcutta. The Commission has recommended that: (i) the net receipts from the 1972 Entry tax (now amounting to about Rs. 40 crores) should be divided among the CMDA, Calcutta and other CMD municipalities (taking away the share of the non-CMD municipalities) in the ratio of 50:30:20; and (ii) that the net receipts from the 1955 entry tax (about Rs. 5 crores) should be divided among the non-CMD municipalities on a population basis. It should be noted that the Commission has not expressed any view on the question whether the Entry Tax is a good tax or not. The only point considered was that in the present conditions of the finances of the state government, there was no way of avoiding reliance on this source of revenue.

The share of the Motor Vehicles Tax given to the municipalities is only Rs. 2 crores now. Any change in the present system will entail a detailed examination of a wide variety of variables for which all the necessary information is not readily available. The Commission expects that a full study will be made later and, pending that, recommends the doubling of the amount currently received by each municipal body raising the total distribution under this head from Rs. 2 crores to Rs. 4 crores.

Even after all this, substantial increases in tax-sharing will be necessary if the grant-element is to be reduced. The Commission has examined many alternatives, like a surcharge on sales tax, or on the electricity duty or on the state excises. They would all be administratively easy to collect but it is feared that there will be large scale avoidance of tax if the surcharges are imposed on urban sales only. And if there is a general surcharge, there will be the necessity of making the receipts available to all local bodies, urban and rural.

The Commission has concluded that the best solution will be to divide the receipts from the entertainment tax. The suggestion that the municipalities should themselves collect the tax has been examined but has not been considered efficacious. A two-tier system—a state tax and also a local tax—has been rejected on the ground that it will make the whole process unnecessarily complicated. It is, therefore, recommended that half of the net receipts from the tax (*i.e.*, half of Rs. 20 crores presently) should be transferred to the municipal bodies on a population basis.

THE FINAL RESULT

The full results of the recommendation are shown in the next Table, for 1982-83 and for 1985-86.¹² A few important points deserve notice. First, as a result of the transfers proposed to be made, some municipalities will

¹²WBMFC, *Report*, *op. cit.*, p. 132, Table 10.6.

have surpluses in the revenue account (the total being Rs. 7.74 crores in 1982-83 and Rs. 12.17 crores in Rs. 1985-86). These surpluses will be carried to the Plan account. On the other hand, other municipal bodies will have deficits and these have to be fully met by grants. Secondly, the major part of the deficits in 1982-83 is accounted for by Calcutta and

TABLE FINANCIAL RESULTS OF WBMFC RECOMMENDATIONS

	<i>Calcutta</i>	<i>Other CMD</i>	<i>Non-CMD</i>	<i>Total</i>
<i>1982-83</i>				
1. Revenue account gap	-22.08	-12.99	-6.30	-41.37
2. Proposed transfers from state government				
(i) Share of 1972 Entry Tax	+12.00	+8.00	—	+20.00
(ii) Share of 1955 Entry Tax	—	—	+5.00	+5.00
(iii) Share of M.V. Tax	+2.00	+1.00	+1.00	+4.00
(iv) Share of Entertainment Tax	+3.00	+4.50	+2.50	+10.00
(v) Total	+17.00	+13.50	+8.50	+39.00
3. Final Rev a/c gap				
(i) Deficits	-5.08	-3.76	-1.27	-10.11
(ii) Surpluses	—	+4.27	+3.47	+7.74
4. Grants-in-aid on Revenue a/c	+5.08	+3.76	+1.27	+10.11
5. Total Transfer [2(v)+4]	+22.08	+17.26	+9.77	+49.11
<i>1985-86</i>				
1. Revenue a/c gap	-23.09	-15.09	-7.33	-45.51
2. Transfers (derived from item 2 above)	+22.61	+17.96	+11.31	+51.88
3. Final deficits	-1.32	-4.02	-1.29	-6.63
4. Final surpluses	—	+6.91	+5.26	+12.17
5. Grants-in-aid on Revenue a/c	+1.32	+4.02	+1.29	+6.63
6. Total transfer	+23.93	+21.98	+12.60	+58.51

SOURCE: WBMFC, *Report, op. cit.*, p.132.

the other CMD municipalities but the deficits go down substantially for Calcutta by 1985-86 largely because of the growth of tax-shares. Thirdly, the total transfer (tax-shares plus grants) increase only by Rs. 9.40 crores, from Rs. 49.11 crores in 1982-83 to Rs. 58.51 crores.

And, lastly, the total transfers as proposed are not very large when one remembers that in 1980-81, the subvention for paying dearness allowance alone was Rs. 14.38 crores. At the request of the Commission, the Finance Department of the state government made an estimate of the likely transfers to the municipalities in the coming year. The government projection came quite close to the estimates made by the Commission.

PLAN FINANCE

The Commission has recommended that every municipal body should frame a Plan budget every year, forming part of its own Five-Year Plan which will have to be an integral part of the Five-Year Plan of the state. The municipal Plans will be financed by their surpluses from the current revenues (where attained) and from special Plan assistance from the state government, including both Plan grants and loans. It has been suggested that the grant element should be larger in the case of small municipalities and also in all cases where the Plan projects are essential but are not likely to yield adequate returns. The Commission's recommendation for the cancellation of all debts to the state government or its agencies as on March 31, 1981 will go a long way in easing the capital budget (and thus the development budget) of the municipal bodies.

It has also been recommended that if a municipal body is able to raise its own revenue above the assumed rate of growth of 10 per cent per year, the excess will be available for its Plan budget together with a matching grant from the state government. The primary aim in every case should be to level up the services in the backward municipalities or in the backward sectors or wards. Loans from the term-financing institutions should be encouraged by the government, which should stand as a guarantor in the case of remunerative projects. A special advantage of institutional borrowing is that the lending institutions should be able to undertake a continuous independent monitoring of the use of the loans.

The need for trans-municipal development agencies will continue. The Commission has recommended that the municipal dues to the Calcutta and Howrah Improvement Trusts up to 1980-81 should be cleared by the state government and the obligation to make further contributions should be removed. The Commission also recommended that the CMDA assistance amounting to Rs. 11.91, being the value of the asset transferred to municipal bodies, should be written off along with the debts to the state government, but the municipalities will be fully responsible for the maintenance and operation of these assets. This should not create any difficulty as the necessary expenditure has been included by the Commission in its estimates of revenue expenditures and the gaps. Ways and means advances should be kept down and arrangements

should be made with public sector banks for such advances upto specified limits under government guarantee, if required. It is expected that such an arrangement will prevent the ways and means advances from becoming permanent loans.

OTHER RECOMMENDATIONS

The Commission was asked to examine the question of re-drawing the boundaries of the municipalities, where considered necessary. This raised a number of questions, namely, those of extending the area to include the contiguous urban outgrowths, merging neighbouring municipalities and also dividing big municipalities into two or more autonomous units. The reactions of the municipal bodies themselves varied and no clear view appeared. The Commission has noted that some existing municipalities wanted the addition of neighbouring outgrowths in the expectation of larger revenues but it was also pointed out that accretions of suburbs to the Calcutta Corporation in the past had not meant an improvement in the finances. There are special cases like the Siliguri urban area which sprawls over two districts. The Commission has recommended a Corporation for this area. Durgapur Notified Area is also sprawling but here an immediate easy solution is not clearly seen. There is a special case of Jiaganj-Azimganj where two parts of the same municipality are on two sides of the Hooghly river unconnected by any bridge. The Commission has noted that the problem of boundaries is not simply a matter of finance or even of scale economies or administrative efficiency, but a political issue also. There is, for example, strong opposition to the merger of even small neighbouring municipalities, though there is some willingness to enter into arrangements for common services. The Commission has recommended that a Municipal Boundaries Commission should be appointed after every Census (*i.e.*, after the full tables have been published) to examine the question of the necessary changes in the boundaries.

The question of de-municipalisation also arose. The Commission has noted that if an assured 'own' income test of Rs. 1 lakh be adopted, as many as 29 urban authorities will not pass this test. And there are municipalities with very small populations and low population-density. The Commission has recommended a minimum internal income of Rs. 1 lakh particularly in the case of new municipalities. There are two municipalities which do not satisfy any of the reasonable conditions and in their case the Commission has recommended that a three-year grace period should be allowed and the whole question reviewed in 1985-86.

There are other important recommendations also. They include, first the establishment of an independent Planning and Monitoring Depart-

ment in the Corporation of Calcutta and 'planning cells' in other municipalities, manned, if necessary, by officers deputed by the government. Government departments should also be ready to offer consultancy services when needed. The Commission has welcomed the decision to place in each municipality four government-appointed officers to look after administration, finance, civil works and health services. The second important recommendation relates to statistics and information. It has been said at the beginning that the Commission was seriously hampered in its work by the lack of adequate and up-to-date information. The spadework in this field has now been done and it may be expected that the future Municipal Finance Commissions will be able to work on the basis of much better data. This requires not only the provision of suitable staff at the municipalities and the efficient designing of schedules but also a considerable strengthening of the Local Bodies Directorate of the Government. In the scheme of things as visualised by the Commission, there has to be full and prompt coordination of all transactions and activities in which the state government and the municipalities are associated. This requires an efficient coordinating machinery at the government level.

AFTER THE REPORT

The Commission has worked on a ground inadequately prepared for its complex work and it is conscious of many limitations of its analysis. There is, however, the confident expectation that the adoption of the recommendations will put the municipal finances in the state on a sounder footing than they are now without increasing too much the burdens on the state government. The assurance of funds through increased tax-shares should enable the municipalities to work as local self-government in a truer sense of the term than has been possible up till now. At the same time, the integration of the urban planning process with that for the state as a whole will ensure better citizen service every where and at least the levelling up of the services where they are particularly poor.

In conclusion, one should note that the Chief Minister of West Bengal, who is also the finance minister, has stated in his speech presenting the final budget for 1982-83 on September 4, 1982, that the government has already accepted the recommendations of the Commission regarding the cancellation of the municipal debts to the Government and the division of the net proceeds from the entertainment tax. An encouraging beginning has been made and it is possible to hope that successive municipal finance commissions will be able to put the state-municipal financial relations in West Bengal on a more efficient and progress-oriented foundation than it has hitherto been possible. Another encouraging fact is the

establishment of an Institute for Local Government and Urban Studies (attaches to the Local Bodies Directorate), which will undertake the tasks of collection of data and of evaluation and also provide facilities for training at all levels. □

The Finance Commission and Municipal Finance

M.N. BUCH

LOCAL BODIES in India have a double disadvantage in the matter of access to funds for maintenance of day to day administration, and for capital investment in upgradation of infrastructure. Being creatures of the states they are outside the purview of statutory devolution of funds and, therefore, are wholly dependent in the matter of grants upon the discretion of the state governments. In the matter of sharing in the funds available for capital investment through the Five Year Plans, most municipalities are once again outside the purview of the Plans. Whatever funds are made available to the local bodies for capital investment are restricted to what each state government is prepared to dole out from its own plan allocation under various heads. There is, however, no systematic attempt at preparing a perspective plan for urban areas and trying to fit it into the overall perspective of the Five Year Plan.

STUDY OF MUNICIPAL RESOURCES

The Seventh Finance Commission did suggest the initiation of an exercise to look at the resources of municipal bodies, the level of services and the resource gap between what is actually available for expenditure on these services and what was needed to be spent. The Ministry of Works and Housing had entrusted the exercise to the Town and Country Planning Organisation but the work remained incomplete and, for want of adequate data, the Seventh Finance Commission did not make any recommendation with regard to meeting the non-plan, non-development resource gap of local bodies. The only additionality was in the matter of municipal roads, but here too the factor which probably weighed with the Finance Commission was that many state and national highways pass through towns and for their maintenance it was necessary to give state assistance.

Fortunately, when the Eighth Finance Commission was being set up, the Ministry of Finance and the Ministry of Works and Housing decided

to undertake a much more detailed study of the resources of municipal bodies and the level of services existing in towns. The study was entrusted to the National Institute of Urban Affairs (NIUA). The study has been completed and will shortly be submitted to government. The coverage has been very extensive, with data having been collected from 86 per cent of all municipalities and municipal corporations. About 55 per cent of the non-municipal local bodies such as Towns Area Committees, have also responded and data in relation to them have been incorporated in this study.

The method of collection of data was through structured questionnaires aimed at ascertaining income and expenditure on the revenue side and on the capital account for the years 1974-75 and 1978-79. The data on the components of income and expenditure have also been collected *in toto* through questionnaires. Income and expenditure for both years has been converted to per capita income and expenditure at the constant price level of 1970-71. Similar details about these services have also been collected though, in fairness, it must be conceded that this information is somewhat sketchy. Nevertheless adequate data have been made available for comparative studies.

It is a well-known fact that all municipalities in this country face constant financial stringency and as a result thereof are unable to provide adequate services to the citizens. And yet, paradoxically enough there is a revenue surplus in the aggregate. For example, in 1979-80 the total ordinary income of all the municipalities combined was approximately Rs. 850.75 crores. As against this the ordinary expenditure was about approximately Rs. 756.6 crores. There is thus an actual surplus of approximately Rs. 94 crores on this account. Even on the capital account, as against an income of about Rs. 206.25 crores, the expenditure was about Rs. 245.6 crores. When one deducts this deficit of approximately Rs. 39 crores from the surplus on the revenue account, there is still an overall surplus of about Rs. 54 crores. This position is reflected class-wise ranging from metropolitan cities to class VI towns, and state-wise also. Obviously on the simple arithmetic of income and expenditure, the local bodies would not be entitled to any consideration in terms of devolution of additional funds. It is for this reason that the study attempts a review of the position of services in urban India, especially in terms of maintenance of existing ones.

LEVEL OF URBAN SERVICES

In the year 1963 the Zakaria Committee looked at the whole question of level of services and the financial implications of maintaining them at a satisfactory level. This Committee depended on data collected by selective random sampling and, on the basis of this, the Committee laid

down certain expenditure norms class-wise for municipalities for selected municipal services such as water supply, drainage, etc. The Committee recommended that those municipalities which are spending less than the prescribed norm needed to be supported so that expenditure could come up to the desired level. The Zakaria Committee recommended an additional amount of Rs. 99 crores per annum.

The NIUA has approached the problem of assessing the gap between resources and desirable levels of expenditure from a number of angles. It has been observed that two main causes of the apparent revenue surplus are: (1) in most states, municipalities are required to present surplus budgets because municipalities having deficit budgets are required to obtain the prior approval of the state government before the budgets can be adopted. Thus municipalities deliberately keep operations at a low level regardless of the effect on the maintenance of services; (2) most municipalities do not provide for depreciation and debt charges through a sinking fund, with the result that either obsolete machinery and equipment are not replaced or the cost of replacement is charged to capital account. Both are reflected in the steady deterioration in the maintenance of services. Therefore, merely looking at the budgets does not reveal the true resource gap in terms of requisite expenditure on maintenance of services. The NIUA study, therefore, has looked at the problem from the point of view of income, expenditure and level of services and has then tried to arrive at the figure of what would represent the true resource gap.

Insofar as income is concerned, there has been done a classwise classification. The average per capita income of all towns in a particular class has been arrived at on a state-wise basis. Then all towns above this average have again been aggregated and the average of income of this category of towns has been arrived at and has been termed as the *higher average*. A similar aggregation and averaging has been done of all towns whose income is below the class average and this figure has been termed the *lower average*. In terms of the gap in resources, viewed from the income point of view, the difference between the lower average and the higher average has been estimated as the *resource gap*. Taking all classes of towns in all states the gap comes to approximately Rs. 210 crores per annum, but after suitable adjustment of surpluses and deficits in each class, it comes to approximately Rs. 191 crores.

A similar exercise has been done in terms of expenditure levels and here the gap comes to approximately Rs. 230 crores per annum. However, when we further break down the expenditure servicewise and strike the higher and lower averages of expenditure on each service, the gap rises to Rs. 303 crores per annum. A further comparison has been made according to the normative standards laid down by the Zakaria Committee, upgraded to current levels, and the gap then rises to approxi-

mately Rs. 810 crores per annum. On an assumption that the figure of Rs. 303 crores per annum represents the additional amount required to maintain the existing services at existing levels, the difference between the figure arrived at by upgrading the Zakaria Committee recommendations and the figure of Rs. 303 crores, *i.e.*, about Rs. 500 crores, represents the capital expenditure needed to take care of depreciation, obsolescence, etc.

The NIUA exercise is weakest in assessing access to services in physical terms. Most municipalities just do not have information in this regard and obviously more detailed studies are needed to assess both productivity and efficiency in delivery of services. Therefore, for the purposes of Eighth Finance Commission the study naturally presupposes that additional inputs in terms of money will bring about an averaging of services at least up to that level which is now enjoyed by the better off towns in each class. This would still leave the urban infrastructure at an unsatisfactory level in terms of upgradation to acceptable norms. But it would at least permit the municipalities to improve the working of such services as they do provide up to a level where the average citizen has some access to them. More than this cannot be accepted in the next five years because in terms of management capability, technical skill and ability to implement projects there are severe limitations to what can be done.

The importance of the NIUA exercise is that for the first time the Eighth Finance Commission will have adequate data available for it to decide whether or not there is a good case for an additionality in devolution of Central funds for the specific purpose of assisting urban local bodies. Whether or not the resource gap projected is accepted *in toto* for Central assistance remains to be seen.

PASS-THROUGH PROVISIONS

One vexing problem is how to ensure that any additionality given for the purpose of assisting local bodies is in fact passed on by state governments to these institutions. There is no direct routing of funds by the Central government to local bodies. It is not altogether unknown for state governments to divert funds meant for local bodies either by not passing them on or by making countervailing deductions in normal assistance from the state budget. Without bringing about a change in the constitutional relationship between local bodies and the state governments, there is still scope for evolving institutionalised arrangements which will ensure smooth and adequate transfer of funds to the urban local bodies. Kerala and Gujarat have done this statutorily and West Bengal has done it by administrative arrangement. In Gujarat, for example, the Municipal Finance Board constituted under the Gujarat

Municipal Finance Board Act, 1979, is the channel through which grant-in-aid, loans, etc., flow from government to the local bodies. The advantage of such an arrangement is that a statutory board can develop pressures on behalf of local bodies which could prevent government from cutting into municipal resources. Some such institutions will have to be developed in all states so that any additional funds flowing from the Centre to the states for urban local bodies on the recommendation of the federal Finance Commission do actually find their way out to the municipalities. It would then be up to the municipalities to ensure that the funds are properly utilised.

A WORD OF CAUTION

One final word of caution. The performance of local bodies in relation to recovery of taxes and dues is very poor, averaging between 40 and 50 per cent throughout the country. An additionality of funds through devolution would also require a similar resource mobilisation effort by the municipalities. The temptation to avoid resource mobilisation through proper recovery of dues because some additional funds have been devolved to the local bodies must be ruthlessly curbed. State governments already have adequate statutory powers to discipline the local bodies. These must be exercised. □

*Municipal Reforms and State-Municipal Administrative Relations in West Bengal**

ABHIJIT DATTA

WEST BENGAL is in the midst of major reforms in municipal administration with the passage of the substantial amendments to the Bengal Municipal Act, 1932, enacted in 1981; a new Calcutta Municipal Corporation Bill, 1980, and the setting up of a new corporation in Howrah through the Howrah Municipal Corporation Bill, 1980. Both the bills have received the President's assent and are now awaiting to be enforced after information of electoral constituencies and conducting elections. The enactments, when enforced, would usher in a new era of municipal government for the twin cities of Calcutta and Howrah. Earlier, two attempts were made to review the various aspects of municipal administration—one by the Bengal Administration Enquiry Committee (1945) headed by Sir Archibald Rowlands, and the other by the Corporation of Calcutta Investigation Commission (1949) headed by Justice C.C. Biswas. While the Biswas Commission was asked to review the working of the Calcutta Municipal Act, 1923, the terms of reference of the Rowlands Committee covered *inter alia* the entire gamut of the local self-government institutions which could be utilised "as an efficient adjunct to the (provincial) administration". Most of the problems of municipal administration identified by the Rowlands Committee merit re-examination in the present context; additionally, one could expand the list by including a few new problem areas in the agenda of reform. The unresolved areas of concern of the Rowlands Committee were: (i) criteria for municipalisation, (ii) municipal reorganisation in Greater Calcutta, (iii) municipal staffing and management, and (iv) State machinery for municipal supervision.¹ To this, three more areas of out-

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¹Bengal, *Report of the Bengal Administration Enquiry Committee, 1944-45*, Alipore, 1945, pp. 103-110.

standing concern could be examined, viz.: (1) types of municipal authorities, (2) the municipal executive, and (3) municipal functional domain. In the present paper we would examine the various issues relating to these seven areas of concern in municipal administration in West Bengal, although in a rearranged sequence.

CRITERIA FOR MUNICIPALISATION

In West Bengal municipalisation of a 'rural' tract used to be considered on the fulfilment of the three census tests of urbanisation relating to the population size, density and the extent of non-agricultural adult male population. The recent amendment (1981) to the Bengal Municipal Act has raised the population size from 5,000 to 10,000 and the population density from 1,000 to 2,000 per square mile (2.59 square kilometres), while retaining the census criteria of non-agricultural occupation, but adding an additional criterion of adequacy of internal municipal revenue for the discharge of its functions. It is not clear whether the existing municipalities not fulfilling the above criteria could be denotified or amalgamated with contiguous municipalities against the views of the concerned municipalities, except through an open review process (e.g., a boundary commission). The Rowlands Committee recommended that all municipalities having less than 20,000 population should be either denotified or amalgamated with contiguous municipalities.² The Rural-Urban Relationship Committee also thought³ that a minimum population of 20,000 would be needed to provide the basic urban services.

The introduction of an income test for municipalisation in West Bengal would be meaningless without a specific minimum limit, as in Tamil Nadu where Rs. 3,00,000 is the currently prescribed minimum required municipal income. At the other end of the municipal scene, the constitution of a municipal corporation might follow a population test of 5,00,000 and a minimum annual income of Rs. 1,00,00,000, as suggested by the Rural-Urban Relationship Committee.⁴ In both cases, however, a definite income limit would be meaningful if these are periodically revised and applied to both the existing, as well as the future, municipal authorities.

TYPES OF MUNICIPAL AUTHORITIES

West Bengal has four types of municipal authorities: (a) notified area authorities, (b) town committees*, (c) municipalities, and (d) corpora-

²Report of the Bengal Administration Enquiry Committee, 1944-45, *op. cit.*, p. 109.

³India, Report of the Rural-Urban Relationship Committee, Vol. I, Delhi, 1966, p. 26.

⁴*Ibid.*

*The town committees have close similarities to the Class III stations under the Bengal Municipal Act, 1876.

tions. The town committees are wholly nominated bodies with the local Sub-Divisional Officer as the Chairman. These are shortly to be fully municipalised so that in effect there would be three types of municipal authorities: on the one hand, there are the notified area authorities which are nominated municipal institutions for rapidly urbanising rural areas waiting to be fully municipalised; while, on the other hand, there are the normal elective urban local authorities, like the municipalities and the corporations.

The notified area authorities suffer from the odium of nominated institutions with tax powers, which could be justified only for a limited period; the town committees, on the other hand, could be partly elected where necessary, as in UP, and made to serve the requirements of both the small towns and urbanising rural areas. With a strict income test for municipalisation, the town areas could act as transitional municipal institutions. The other option of creating Town Panchayats of the Gujarat variety might stand at a disadvantage within the rural dominance of the *panchayati raj* system. Continuance of the town committees with provision for partly or fully elective members would also bring the benefits of municipalisation for the smaller urban centres having limited range and reduced rates of taxation and fewer functional responsibilities. The nature of state control over these committees would have to be more intimate—through the district administration—while the proportion of grants also would be more compared to be municipalities (say, about 50%). If this approach is accepted, then a separate legislation governing these institutions seems justified.

At the other end of the scale, the distinctiveness of the municipal corporations, arising from a commissioner-oriented executive, would disappear with the coming into operation of the new legislations for Calcutta and Howrah. It may perhaps be appropriate at this stage to think of a State-wide legislation covering all municipal corporations outside Calcutta. This would include Howrah and Chandernagore to start with, but one could think of constituting corporations in the other growth centres of West Bengal as well, like, Asansol, Siliguri, Kharagpur and, later, Haldia.

In effect, therefore, there would be three sets of municipal institutions—each with its distinct set of tax powers, functional domain, staffing pattern and the degree of state control.

MUNICIPAL REORGANISATION IN GREATER CALCUTTA

The problems of the riparian municipalities in greater Calcutta on both sides of the Hooghly attracted the attention of the Rowlands Committee which recommended that:

... the Municipalities in the industrial area be amalgamated into

groups which will be sufficiently influential and resourceful to ensure a high and uniform standard of municipal services on both banks of the Hooghly. We believe that such amalgamation would result in increased efficiency, and in economy.⁵

At the same time, the Committee suggested incorporation of Garden Reach, South Suburban and Tollygunj municipalities within the Calcutta corporation or, in the alternative, amalgamation of the three municipalities. Tollygunj was annexed to Calcutta in 1951, although it is not yet fully integrated with the city's civic services. Garden Reach and South Suburban were opposed to their merger with Calcutta, nor has the Calcutta corporation been anxious to extend its territory. The suburban municipalities fear increases in taxation and the city corporation worries about the investments needed to level-up suburban civic services in the event of merger.

The question of extending Calcutta's area and the problems of riparian municipalities in the Calcutta metropolis are really two sides of the same coin and cannot be solved in isolation. Over the years various attempts have been made through annexation, amalgamation, joint services and special-purpose authorities; but no significant improvement is in sight. What is generally not realised is that an increase in the size of the municipal authority does not by itself ensure viability; on the revenue side, it is really the fiscal base that is the key; on the expenditure side, most locally-based services being labour-intensive are insensitive to scalar economy. Generally, a smaller number of large local authorities are favoured from the point of view of control; but, it is extremely difficult to prove that this ensures efficiency or economy as well.

In the Calcutta metropolitan area, apart from the municipal authorities, there are a large number of peri-urban areas, in addition to the rural areas, which constitute about half of the total metropolitan area and cover a tenth of its population. The future local government status of all these areas would have to be considered together with the question of municipal reorganisation.

Allied to the question of local government *per se* in the Calcutta metropolis, the future of the *ad hoc* statutory development and functional authorities are linked with the delivery of civic services in the metropolitan area. Many of the State functions having local bearing (traffic police, fire service, primary education, local health centres, town planning, etc.) may need to be relocated or realigned in the event of a governmental reorganisation in the Calcutta metropolis. Multiplication of municipal corporations with an expanded core city is too simplistic a solution for the governmental problems of the metropolis and a two-tier system approach to local government seems to be the only solution not

⁵Report of the Bengal Administration Enquiry Committee, 1944-45, *op. cit.*, p. 104.

tried so far in Calcutta.⁶

MUNICIPAL FUNCTIONAL DOMAIN

Unlike other states, in West Bengal the basic municipal legislation (Bengal Municipal Act, 1932) does not distinguish the various municipal functions into obligatory and discretionary categories, although the Act mentions a few priority items of expenditure on account of loans, trusts, establishment and audit. The Act specifies the various activities on which municipal fund may be spent and this includes a very wide range of functions as shown in the next Chart.

The municipalities are supposed to work within the delegated functions assigned to them, although the nature of such delegation is broad enough for both the municipalities and the State Government to function together. This arrangement suffers from the disadvantage of blurring the responsibilities of the two levels of government. Also, the limitations of finance and lack of qualified personnel stand in the way of the municipalities entering into competition with the state government.⁷

It is perfectly legal for a municipality in West Bengal to maintain both primary and secondary schools, hospitals, fire services; undertake milk supply, markets, cinemas, hotels; arrange for relief in time of scarcity; undertake social housing; excavate private tanks for water supply, and even to incur "expenses of indigent inhabitants of the municipality for journeys to and from any hospital in any part of India for the treatment of special diseases and of their subsistence and proper clothing threat..."

The legislation also contains a residuary functional clause for "all acts and things which are necessary for carrying out the purposes of this Act or which are likely to promote the safety, health, sanitation, education, culture, welfare or convenience of the inhabitants of the municipality", which could virtually include the entire range of state list functions enumerated in the Constitution.

The question that arises is whether this type of wide functional jurisdiction is appropriate for the municipal authorities, with limited funds at their disposal and whether a modest list should be substituted specifying obligatory and discretionary functions. On the other hand, one may argue that municipal authorities could be expressly given concurrent functional jurisdiction with the state (barring the regulatory state functions

⁶Abhijit Datta, "Institutional Alternatives for Urban Development in Calcutta", *Nagarloka*, Vol. IX, No. 3 (July-September, 1977).

⁷Abhijit Datta, "Municipal Administration in West Bengal", in A. Avasthi (ed.) *Municipal Administration in India*, Agra, 1972, p. 407.

CHART

MUNICIPAL FUNCTIONAL DOMAIN IN WEST BENGAL
(BARRING THE MUNICIPAL CORPORATIONS)(a) *Civic Services*

- Public works, street cleaning and lighting, planting and preservation of trees, open spaces and recreation, municipal markets and slaughter houses, survey of buildings and lands, social housing.
- Water supply, conservancy and drainage, repair of private tanks for water supply, maintenance of public conveniences.
- School education, teachers' training and scholarships, public libraries and museums.
- Hospitals, dispensaries, maternity homes, orphanages, poor houses, rest houses, employment of health officers and staff, expenses for treatment of indigent inhabitants, maintenance of ambulance.
- Veterinary dispensaries, employment of veterinary practitioners, improvement of cattle breed, places for disposal of carcass, maintenance of dairy farms and grazing grounds, milk supply.
- Markets, slaughter houses, godowns, cold storages, cinemas, hotels.
- Fire services.
- Fairs and exhibitions.
- Relief in time of famine, scarcity or natural calamity.
- Disposal of the unclaimed dead and paupers.
- Beautification by fountains, trees, river bank development.

(b) *Regulatory services*

- Vaccination, prevention and spread of dangerous diseases, destruction of noxious animals and dogs, propaganda for public health and education.
- Regulation of offensive and dangerous trades and removing noxious vegetation.
- Prevention of cruelty to animals.
- Regulating the disposal of the dead.
- Municipal census.

(c) *House-keeping activities*

- Construction and maintenance of municipal buildings, including buildings for municipal staff.
- Payment of compensation to the public.
- Payment of bonus for compensation to municipal staff, training of municipal staff, publication and purchase of journals and newspapers.
- Purchase of national flag, portraits, statues, placing of wreaths on dead body, cost of public ceremony, civic reception or other functions.

(d) *Miscellaneous*

- All acts necessary for the purpose of the Act or which are likely to promote safety, health, sanitation, education, culture and welfare of the inhabitants of the town.

SOURCE: Section 108 (i) to (xxxvi), *Bengal Municipal Act, 1932* (as amended in 1981).

like, police, etc.) and allowed to operate where the State Government does not appropriate a function through specific legislation. The debate here is between the English concept of *ultra vires* and the German concept of general competence with regard to municipal powers. The *ultra vires* concept to be operational needs to be broadly defined so that a liberal interpretation could confer general competence benefits. In the Indian context a legal delegation to a municipality does not preclude a state to intrude into the municipal functional domain through executive decision. Therefore, the functional separation between the state and local authorities is only notional.

Classification of municipal functions into obligatory and discretionary items also does not mean that the municipalities cannot undertake discretionary functions unless all the obligatory functions are satisfactorily performed; since 'satisfaction' is a subjective judgment and it is impossible to lay down standards of functional performance of municipal regulatory and house-keeping functions, let alone the civic functions. A strict distinction between obligatory and discretionary functional categories has only accounting significance in that the municipalities are obliged to maintain an active list of all obligatory functions. Its practical significance is notional and inoperative.

THE MUNICIPAL EXECUTIVE

In West Bengal, with the passage of the Calcutta and Howrah Municipal Corporation Bills (1980), which provide for mayor-in-council (cabinet) form of political executive, the major problem of municipal executive in the corporation cities is over. What remains is to reconsider the existing nature of the executive system in the municipalities. There are two aspects of this problem: (a) the position of the municipal chairman, which resembles broadly the weak mayor system in American parlance, does not permit a clear separation of the legislative and executive roles of the council: the chairman is to discharge only executive functions. This makes him unduly dependent on the vagaries of the council with its political factionalism. Is it desirable to strengthen his position, and if so, how? (b) the future introduction of a common cadre of state-appointed executive officers in the municipalities, under the recently amended (1981) provisions of the Bengal Municipal Act, 1932 (Section 66(2)) makes it necessary to demarcate the roles of such executive officers *vis à-vis* the chairman.

The second problem is easy to settle: the position of an executive officer could be the same as the commissioner under the new Calcutta and Howrah Bills, that is to say, he would be in-charge of municipal personnel and function under the overall directions and supervision of the chairman.

The position of the chairman, however, is somewhat anomalous. He has no parallel under the English system of local government. The colonial regime foisted the District Officer or his nominee as the *ex-officio* chairman of the municipalities with powers of execution of the council's decisions. He was, in fact, the counterpart of the corporation commissioner in the municipalities. With the passage of the Bengal Municipal Act, 1884, elected municipal chairmanship was provided for; however, his position remained the same as that enjoyed by the collector-chairman. The result of this arrangement has been the stunted growth of the English committee system and concentration of executive function in an individual. He does have minor executive and emergency powers, however. Reform of this situation could be thought of in terms of either opting for a strong mayor (Presidential) system or an executive committee (cabinet) system. Direct election of the chairman has been tried in Maharashtra (1975) and in UP (1976) and both attempts have failed, mainly because of the varying political composition of the council challenging the independently elected mayor. Complete separation of the legislative and executive powers also have not been attempted. A strong-mayor system operates successfully only in the very large American cities and it would be difficult to introduce the complicated system of checks and balances in the municipalities.

The second option of introduction of a cabinet system has been suggested earlier in the context of West Bengal municipalities:

Our suggestion for the cabinet form of municipal government would really be applicable for the bigger municipalities with, say, more than 15 members. Since the success of the cabinet system depends on political homogeneity, this would not only recognise the discipline of the party system, but would also demand a responsible opposition ready to offer alternative policies and exercise necessary vigilance.⁸

The chief executive member (President) may nominate two of the elected members to act as executive members (Vice-Presidents) and the three could form the executive committee. All three would have to be fulltime functionaries and their term could be coterminous with that of the council. Necessary restrictions against frivolous no-confidence motions against the executive committee could be incorporated. The chairman may continue to function as a speaker.

The third option mentioned in the Indian context is the introduction of a city-manager system, as prevalent in the small and medium towns in America.⁹ This being a bureaucratic solution to the problem of the

⁸Abhijit Datta, "Municipal Administration in West Bengal", *op. cit.*, p. 406.

⁹India, *Report of the Task Force on Planning and Development of Small and Medium Towns and Cities*, Vol. I, New Delhi, 1977, p. 67.

municipal executive will not be acceptable, since the municipalities are the only form of local government in India which have tasted political power of decision-making and a complete reversion from a system of political executive to an appointed civil servant is likely to be a non-starter.

It is curious to note that no one in recent times has suggested the introduction of the English system of the committee-oriented municipal executive under Indian conditions. The centralisation of the municipal executive (even under a weak-mayor variety) for 140 years in India makes such a proposition unacceptable to all concerned.

MUNICIPAL STAFFING AND MANAGEMENT

West Bengal municipalities have long been devoid of top-level officers in charge of the day-to-day administration. One reason is the extreme poverty of municipal finance; but the main reason is that the municipal chairman with the various committee chairmen have been functioning in executive capacities, resulting in a confused state-municipal administration. The State Government also took little interest in devising a suitable municipal personnel structure on the mistaken belief that a separate personnel system leaves very little for the state government to do in this regard. The examples of Maharashtra and Gujarat where a separate personnel system exists along with a well-designed personnel structure, at the instance of the concerned state governments, have gone unnoticed.

In 1955, through an amendment of the Bengal Municipal Act, 1932, the state government took the power to direct a municipality to appoint all or any of the following officers and staff within a specified period: (a) an executive officer, (b) a secretary, (c) an engineer, (d) a health officer, and (e) one or more sanitary inspectors. They could not be removed or suspended by a municipality, except by passing a resolution of two-thirds majority in the council. However, the operation of this provision has been halty, especially in the absence of a cadre from which to draw the officers with required qualification and experience. Recently (1981), the Bengal Municipal Act, 1932 has been further amended to provide for two categories of managerial staff:

- (a) officers to be appointed by the government and paid from government funds for a municipality or a group of municipalities, but subject to the administrative control of the municipality; these are: (i) an executive officer, (ii) an engineer, (iii) a finance officer, and (iv) a health officer, and
- (b) officers, of whom those carrying monthly salary of Rs. 1000 would need state sanction, may include: (i) a secretary, (ii) a

medical officer, (iii) one or more sanitary inspectors, (iv) a superintendent of water works, (v) an assessor, (vi) an office superintendent, and (vii) an accountant.

The first category of posts have the potential of forming into state-wide unified cadres of municipal officials. It is somewhat anomalous that the state government would be paying for them. Perhaps this was a political compromise; partly, of course, this is due to the financial weakness of the West Bengal municipalities to afford such an induction of highly paid municipal staff. There needs to be some relationship between expenditure on general administration as a proportion to total municipal expenditure (which could be around 25%). Also varying sizes of municipalities, with varying tax bases would need different staff strength; some may have to share the services of some officers with contiguous municipalities. The whole thing needs to be gone into details, with staff strength determined on the basis of work studies carried out by the O & M cell of the state government. The important point is that henceforth all municipalities would have a full-time executive officer. His relationships with the chairman are to be delineated with a clear understanding that he functions under the overall guidance and supervision of the political executive and in case of any conflict, the executive officer will have to be withdrawn. If the position of the chairman undergoes changes in future through the creation of a cabinet system, the role of the executive officer would result in a corresponding change. Improvement of municipal management has to be in conformity with the imperatives of a political executive in the municipal sphere.

It might be of interest to note that the Rowlands Committee recommended the appointment of an executive officer for each municipality, primarily to tone up tax collection. To quote:

We believe that the existence of such an officer in every municipality will greatly improve collections, and will ensure that, even when the Chairman is absent or otherwise engaged, municipal affairs will continue to run smoothly.¹⁰

However, the Committee was divided on the question, whether "these officers should form part of a 'Municipal Service', appointed and paid for by government, and transferable when occasion arises", or whether "the Executive Officer should be a Municipal servant". The majority view favoured the latter course.¹¹ Current thinking seems to have reversed the earlier liberal disposition expressed under an alien rule.

¹⁰*Bengal Administration Enquiry Committee, 1944-45, op. cit., p. 106.*

¹¹*Ibid.*

STATE MACHINERY FOR MUNICIPAL SUPERVISION

The idea of an Inspectorate of Local Bodies to be attached to the State Department of Local Self-Government was first mooted by the Rowlands Committee, but nothing came of it until the Bengal Municipal Act, 1932, was amended in 1955 which provided for a Director of Local Bodies. This has been acted upon only recently (1978) and the powers vested with the Divisional Commissioners for supervision of the municipalities now (since 1981) has been delegated to the Director. The three Inspectors of Local Bodies attached to the three divisions now function under the Director. In the absence of a regional set-up (as in Andhra Pradesh, Haryana, Kerala, Punjab and Tamil Nadu) or an arrangement with the district administration (as in Gujarat, Maharashtra and Rajasthan) such direct functioning from the headquarters is not conducive to speed and efficiency. Moreover, the *raison-d'être* of the municipal directorates have been the management of a centralised municipal cadre; without such a control function, the developmental role of the Director has nowhere been manifest. It may be recalled that the Rural-Urban Relationship Committee suggested that the directorates should "guide and advise local authorities in the solution of their current and future problems and advocate their cause with the relevant departments", having specialised sections on personnel, central valuation, planning and finances, and general supervision.¹² In order to be effective, the municipal directorate would have to equip itself properly to technically assist the municipalities. Unless this is done without further loss of time, the justification for such a directorate might be questioned.

Along with the Directorate of Local Bodies, a separate Municipal Engineering Directorate has been created to prepare plans for water supply, drainage and sewerage disposal in the municipalities outside the Calcutta metropolitan area, while the projects are being executed by the original functional (Health) department. Either the entire charge of public health should come to the Local Government, or things should stand as they are. The house-keeping role of the Local Government Department, including its Directorate of Local Bodies, needs to be properly designed and attended to. A few examples are: development of a proper information system, creation of a work study cell to streamline the administrative problems faced by the municipalities, setting-up of a consulting unit to appraise municipal projects, assistance to the municipalities to prepare corporate plans, initiate reforms in budgeting and financial control practices, rendering legal advice—the list is really endless, provided there is a genuine willingness to help rather than

¹²*Report of the Rural-Urban Relationship Committee, Vol. I, op. cit., p. 120.*

exercise more control over municipal authorities. We can do no better than to quote from the Rowlands Committee's despair in this connection:

Little has been done to guide or to encourage Municipalities, inspections have been few and generally superficial, and there have been serious delays in dealing with files relating to municipal matters..... Unfortunately, such delays are typical; they bring Government into disrepute, and lead to confusion in municipal affairs.¹³

CONCLUSION

We have attempted to indicate the possible areas of municipal administrative reform in West Bengal, identify some of the critical issues and also indicate the possible directions of reform. It may be emphasised that all the positive suggestions made here are tentative in the absence of detailed investigation into the maladies of municipal government in the State. For this what is needed is an open exercise for a systems reform, since experience shows that local government reform of a comprehensive nature has distinct advantages over changes of its various components.¹⁴

In the area of municipal finance, such an attempt has been initiated in West Bengal with the submission of the report of a Municipal Finance Commission, covering a wide and comprehensive field.¹⁵ Undoubtedly, finance is the Achilles' heel of any local government system and its belated consideration could negate much of the ongoing municipal reform efforts in West Bengal, as has been demonstrated even in countries with developed system of local government, like Britain.

There is, however, one aspect of the current municipal reform efforts in West Bengal that is somewhat disconcerting. The two voluminous legislations for the corporations of Calcutta and Howrah are meant to be operative at least for a generation; without openness in such reform attempts of monumental dimensions, much of their legitimacy could be at stake. Machiavelli in *The Prince* cautions against such undue haste in initiating reform in the following passage:

There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle than to initiate a new order of things. For the reformer has enemies in all who profit by the old

¹³Report of the Bengal Administration Enquiry Committee, 1944-45, *op. cit.*, p. 107.

¹⁴United Nations, *Local Government Reform: Analysis of Experience in Selected Countries*, New York, 1975, p. 77.

¹⁵West Bengal (Local Government and Urban Development Department), *Report of the Municipal Finance Commission*, Calcutta, March 1982.

order, and only lukewarm defenders in all those who would profit by the new order. This lukewarmness arises partly from fear of their adversaries, who have the law in their favour; and partly from the incredulity of mankind, who do not truly believe in anything new until they have had actual experience of it.¹⁶

Much of the suspicion and hesitancy of the clients of reform could be eliminated by opting for an open system of municipal administrative reforms. □

Housing and Urban Federalism

M.K. MOITRA

THE SIXTH PLAN acknowledges that the public sector has a “marginal though promotional role to play” and based on the gross capital formation in housing, it has estimated that the investment of the private sector will be of the order of Rs. 11,000 crores compared to Rs. 1,490 crores in the public sector. This will give an idea about the level of investments by the public and private sectors. Private sector investments include investments by the cooperative sector, the efforts of the individuals and other investments not included in the public sector. Of the public sector investments Rs. 1,190 crores are in the state sector and Rs. 300 crores in the central sector. The distribution of outlays between the central sector and the state sector shows that housing is essentially in the state sector. The central sector includes provisions for construction of office and residential accommodation for the central government and house building advance for the central government employees. Major portion of the Plan schemes in the state sector are meant for financing different categories of housing schemes including the Minimum Needs Programme of Rural House Sites-cum-Construction Assistance Scheme. The cooperative housing sector is also guided and controlled by the respective state governments usually through the Registrar of Cooperative Societies. Thus at present the housing schemes are mostly implemented in the state sectors and the resources identified are part of the state resources. However, since the role of the public sector investment is very marginal and aims to benefit mainly the poorer sections of the society, these investments are mostly indicators of the relatively greater responsibility of the state governments with regard to implementation of the different types of housing schemes.

With regard to overall resources, however, the picture is somewhat different. The Life Insurance Corporation and the General Insurance Corporation provide about Rs. 60 crores together for the housing sector as a part of their statutory obligations towards the socially oriented sectors. The Life Insurance Corporation (LIC) and the General Insurance Corporation (GIC) also provide 90 per cent of the funds for cooperative housing. The Commercial Banks invest Rs. 75 crores annually for subs-

cribing to the government guaranteed debentures of the Housing Boards and Central Housing and Urban Development Corporation (HUDCO). Presuming that around Rs. 60 crores of this is utilised for subscribing to the bonds floated by the housing boards, the contribution of the LIC, GIC and commercial banks account for about Rs. 120 crores; which is approximately 50 per cent of the annual average mobilisation in the state sector. This does not include the borrowings from HUDCO as they are for the purpose of resource mobilisation outside the Plan. HUDCO's annual average lending is about Rs. 120 crores mostly to the state agencies. Hence though the states are responsible for implementation of the housing schemes for resources they are heavily dependent on the central government agencies. Let us consider the housing situation in India against this background.

'Housing' as a subject has not been mentioned in the seventh schedule of the Indian Constitution. In the state list entries are noteworthy because they mention the related subjects. Land legislation and land taxes are part of the state subjects. Based on this the legislative action on housing and the related subjects have been enacted by the state governments. Similarly, the states have built up their institutional capabilities to utilise more and more resources and implement greater number of schemes. Housing, therefore, has remained primarily as a function of the state government though they continue to depend heavily on the central agencies for their resources.

Initially the central government had a direct involvement in promoting and implementing different schemes. Between 1952 and 1959 some seven schemes were formulated by the central government and were implemented as central sector schemes. From 1969 onwards these schemes were transferred to the state sectors except for the housing scheme for plantation workers. This, therefore, marked an important shift in the policy of the central government from that of direct involvement to that of formulation of policies, programmes and guidelines for the states. The role and functions of the central and state governments are not very clearly demarcated. The Plan outlays, the legislative action, the regulatory action—all are within the jurisdiction of the state governments. The responsibility of responding to the housing needs are primarily theirs and action to respond to this need has to be initiated by them. The central government has also got a key role to play. Its major contribution is through identification and mobilisation of resources, fiscal issues in relation to house property, research and development and promoting housing efforts in conformity with the aims and objectives of the Plan.

mainly focuses on the housing efforts for the poorer sections, implying thereby that the housing efforts for the comparatively affluent sector will mostly be the endeavour of the private sector investments. Certain incentives have also been provided to encourage private sector investments in low-cost housing or the less well-to-do. The states and the centre have crucial role to play with regard to fixation of targets and sharing of responsibility in achieving the objectives. The implementation plans are required to be drawn up by the states within the overall allocations and the sectoral outlays finalised after the usual annual plan exercise. So far as public housing is concerned the objectives have been very clearly defined and in respect of the Minimum Needs Programme (MNP) of rural house-sites definite targets have been fixed. It has been estimated that the total number of landless labourers by 1985 will be 14.5 million of whom about 6.8 million have already been provided with house-sites and the Sixth Plan objective is to provide house-sites to all the remaining landless families of 7.7 million and to provide construction assistance to cover 25 per cent of the eligible landless families which is about 3.6 million. The other major objective set forth in the Plan is with regard to urban housing where the Plan has stressed on the need for taking up more and more sites and services types of schemes for those belonging to the economically weaker sections of the society. The primary objective of public housing is for the economically weaker sections and the low income group of the society. Considering the magnitude of the problem, the Plan acknowledges that it will not be able to solve the housing problem within the current plan period and hopes that with the current level of investment it will take another twenty years to solve the housing problem of the country.

The predictions made about solving the housing problem should be an indicator of the magnitude of the task, as it is unlikely that housing shortage will cease to exist in another twenty years. Housing problem is related to housing need and whereas the shortage is usually linked up with the housing demand. While the housing need is universal, the extent and type of the need will differ considerably on the basis of factors like family size, climate, terrain, etc. The housing demand, on the other hand, for an individual is related to his income and ability to afford a particular type of housing. The income criteria is an important indicator of the housing demand. It is difficult to make an analysis of the income related demand and instead the simpler method adopted is to estimate the shortage on the basis of the total number of households and existing housing stock. The general practice adopted in India is to exclude the so-called unserviceable housing stock from the count. While one can seriously question the wisdom of such a practice, for the present we should consider the methodology of calculating the shortage than the details of it. Such a calculation requires the data

input of the decennial census. The details of housing stock of 1981 census is not yet available hence all such estimates are currently based on the 1971 census.

However, the estimated shortage and information on available housing stock do not bear much resemblance to the size of the investments and other than giving the quantitative dimension does not play a vital role in determination of targets. Since any discussion on public housing has to commence from this point, it is important to realise this factor. Frequent pronouncements about the housing shortage in the country and the attempts (or lack of it) to tackle this problem need not be considered entirely in the context of Plan allocations. There are other important ways of stimulating housing activity. Our aim is to consider all those issues related to the housing activity.

The entire process of fixation of norms and targets reveals an interesting interaction between the centre and the states. Though the Plan is the outcome of discussions between the states and the central government, the actual allocation of resources is finalised by the Planning Commission. Similarly targets are fixed in conformity with Plan norms. However, there are cases where the states may want to have their own priorities with regard to project formulation and fixation of norms. Since the housing situation varies from place to place and depends on the regional characteristics such a stand by the states is well justified. At the same time the country requires a set of uniform guidelines and objectives. The standards and norms emanate from the objectives. The question, therefore, is the extent to which the States priorities and preferences can be accommodated without drastically altering the Plan norms. The concept of clearcut division of responsibilities cannot work in this case simply because the whole thing is inter-related and cannot be disaggregated. The trend, therefore, has been to discuss and arrive at agreed approaches. This is not always successful but perhaps the best available way.

HOUSING FINANCE

Apart from Plan outlays, the institutional sources of housing finance have been stated. Of these the most important are the LIC and the GIC. Both of them provide long-term housing finance.

In addition, LIC also lends to the Apex Cooperative Housing Societies. The allocations made in favour of the states form a part of the states plan resources. Therefore, though the resources are identified in the state sector, they rely to a great extent on the loans from LIC and GIC for raising the resources. The Central Finance Ministry has to decide on the quantum of loan from LIC and the GIC to be earmarked for the 'socially oriented sectors' which include housing amongst

other things. Since this is a part of the Plan resources its allocation is decided by the Planning Commission in consultation with the states, as a part of State's annual plan on a year to year basis. The states, however, are entirely dependent on the LIC/GIC for total amount to be allocated for the socially-oriented sector. Thus though the Housing Sector outlays are mostly in the State sector, the States are greatly dependent on the LIC and the GIC for meeting a large share of their resources. This, therefore, brings in an element of uncertainty in their programmes as they are unable to ascertain the amount to be allocated for them well in advance. The other important factor is the terms and conditions of the loan, particularly the interest rate. This has an important bearing on the types of housing schemes that can be taken up by the state governments in pursuance to the objectives laid down in the Plan. This has a lot of bearing on the directions in which the public housing activities can move. Let us take, for instance, the cooperative housing sector. They are almost entirely relying on the LIC for its resources. The types of housing schemes that can be taken up by them will depend entirely on the terms and conditions of the loan. Recently the interest rates have been raised. The cooperatives have to consequently reformulate their housing schemes and any intention of the government to induce the cooperative societies to formulate schemes for the less well-to-do have been seriously affected. Similarly, the states' ability to implement the 'social housing schemes' as indicated in the Plan is also partially linked up with the funds available from the LIC and the GIC. The central government directives about the quantum of loan from these sources to be utilised for different housing schemes will set the action plan for the different state governments. To illustrate, atleast Rs. 10 crores of LIC funds are to be utilised for rural housing and the entire amount of GIC funds are to be earmarked for economically weaker sections (EWS) and rural housing.

Thus the proportion of LIC and GIC funds actually determine the types of programmes which the state governments can undertake. Therefore, through some form of financial control with regard to terms and conditions and the sources of loan, States' implementation programme can be influenced substantially. It should, however, be clearly understood this is not a process of arbitrarily deciding on the allocations. These are decided always in consultation with the state governments and frequent dialogues are held with the States to assess the impacts of different decisions. Thus the process of resource allocation and the types of schemes for which they are to be utilised are not results of unilateral decisions. On the contrary, the States always have full opportunity to discuss these issues and their views are given a lot of weight. Nevertheless, the fact that funds are controlled by the autonomous institutions who by their own right can determine the terms

and conditions including rates of interest does impair the States to formulate their own action plans. This in its turn will naturally affect the housing policies and programmes of the State Government. This cannot be avoided, no matter how much detailed and lengthy the process of deliberations may be.

The highest forum for deliberations is the Central Council of Ministers for Local Government, Urban Development and Housing. The Council meets once a year and has made a number of important policy pronouncements with regard to housing and urban development anyway the role of the Central Council will be discussed later. Let us for the time being consider the issues relating to housing finance. In this connection we have so far considered the role of LIC and the GIC. We may now go into the role of Housing and Urban Development Corporation, the largest source of institutional finance for the States and which in course of the last twelve years of its existence made extremely significant contributions to housing, specially low cost housing.

HOUSING AND URBAN DEVELOPMENT CORPORATION (HUDCO)

Set up in 1970, HUDCO's share capital is subscribed fully by the Government of India. HUDCO raises its funds from the following major sources:

- (i) Equity
- (ii) Market Borrowing
- (iii) Loans from LIC/GIC
- (iv) Repayment of loans.

It has differential rates of interest for different income categories varying between 4 per cent to 12½ per cent and different norms for lending for different types of schemes. It also lends for urban development schemes. Recently, the government have recommended a revision of HUDCO norms on the basis of the recommendations of a Working Group which had representatives from both the Government of India and the state governments.

HUDCO's contribution to the housing sector should not be viewed merely in terms of funding of housing activities of the states. In its operations covering slightly more than a decade it has been able to evolve a new approach to housing particularly low cost housing. HUDCO works under a mandate from the government that 55 per cent of its lending must be for the economically weaker sections and the low income group. By insisting that the borrowing agencies work within a cost ceiling it has been able to largely ensure that they are in a position

to formulate schemes within such ceiling limits and have helped in the process of developing the capabilities of preparing low cost housing projects which are financially viable. Its contribution in building up the institutional capabilities of the states are even greater. The states have gradually set up the housing boards as autonomous housing authorities for utilisation of loans from HUDCO. The institutional capabilities have had to be greatly strengthened to respond to the requirements of HUDCO.

The HUDCO has, therefore, been largely instrumental in helping to build the institutional framework in the states. This is a significant factor in determining the role of the states and their agencies with regard to housing. Despite the operational autonomy of the State-level agencies in framing housing schemes and in choosing the resources, because of a very narrow capital structure the options available are very limited. They have to rely on the three or four sources the most important amongst them being the HUDCO. This has built-up a working relationship where HUDCO is in a position to shape and guide the working of the State agencies to a large extent. However, the extent to which this will actually happen will depend on the State Governments and the agencies eagerness to avail of HUDCO loans. In trying to analyse the role of the central and the state governments and the dependence of the latter on the former the role and functions of HUDCO is greatly relevant for the housing sector for several reasons the most important of which is that it is the major source of housing finance in the country. For any effort the state governments in areas which are largely their concern, financial support of the central government is essential. Support of the central government is also necessary for building up the institutional capacity and the technology of design and planning for low cost settlement development programme. No matter how much the housing sector is considered to be a part of the States' functions the central government and its agencies will have to play a key role in promoting the housing activities. Apart from the need for financial support, this also falls into the general pattern where the Government of India carries out the important role of co-ordinator and ensuring that there are certain broad level of uniformities in the approach to the problem. While ensuring that states have their own say in matters of formulation of policy and programmes this approach provides for general uniformity in scheme implementation which should conform to the objectives set forth in the Plan. HUDCO, as the only central government agency wholly involved in this sector, has been able to achieve this objective substantially.

The reliance of the States on HUDCO is substantial. Though it is mostly for financial assistance; for some it also extends to areas of technical assistance on general policy formulation level with regard to

settlement planning and implementation of large housing schemes. From the point of view of the states, this opportunity heralds a new era of building up a partnership in developing new housing strategies to meet the requirements. This relationship has not been built up in case of all the states and many are still critical of HUDCO's dominating role in this respect. But by and large this has set the trend of an event where through a process of partnership it has been possible to evolve schemes for low cost housing. The areas of application are widening. It is no longer restricted to schemes for house construction. It has extended into areas of settlement planning and development of satellite township, integrated infrastructural development programmes and finally State level programmes for urban development. HUDCO's borrowers are not the state governments only. The central agencies, public sector undertakings and, in some cases, private entrepreneurs have also benefited from HUDCO's loan assistance. There is a common element in all such schemes, that they must conform to the HUDCO norms which in its turn ensures uniformity of approach instead of wide diversity in standards in projects as is evidenced in some other sectors.

The states in their turn also try to raise financial resources from within. This comes largely from the Plan allocations and market borrowings. The extent to which states will permit the housing agencies to borrow from market will depend on their own priorities attached to housing. It is for them to decide the extent to which they can allocate the share to the total limit of market borrowing allowed in case of a State by the Reserve Bank of India (RBI). Similarly, some states allocate their share of the LIC/GIC loans (or part of it) to the housing boards to enable them to raise their own resources. These are major decisions involving housing finance which can be taken at the state level. In the ultimate analysis of course the State-wise allocations and the terms and conditions of the loan are decided at centres located away from the states. The balancing factor in this regard in favour of the States is its ability to represent its case at the Central Council meetings. Since this quite an effective deliberative body; this can to a large extent act as the access channel for the state governments. Despite the obvious disadvantage of making one's point in large deliberative body, this has been able to provide great opportunities to the participating states in raising pertinent issues and pressing for major policy decisions with regard to them.

LEGISLATIVE ISSUES

The presence of strong informal system of financing projects is another striking characteristics of the housing sector. Since it is difficult to fit them into the known forms of implementation—finance cycle—it is diffi-

cult to visualise as to where would this important component of housing finance exactly fit in. Whether it would more or less conform to the State guidelines or legislative actions or would be guided by some other acts or guidelines. Informal investments in housing, though substantial, does not provide enough data to assist in any meaningful conclusion. Nevertheless, at least one State, Maharashtra, the State Government have responded to this phenomena by legislations on registration of the proposed investors, other than individual public housing agencies and the cooperative sector. This they have done presumably to protect the interest of the individual apartment owners. It is obvious that once an objective is set the state governments are competent to respond to the necessities from such an objective. The central government has urged the states to adopt the Maharashtra Apartment Ownership Act to encourage group housing. While this is mostly in the form of executive guidelines, there are some central legislations which will greatly influence investments in the housing. Since the legislative actions of both the central government and the state government greatly influence the investments of private sector investments, this issue deserves a closer scrutiny.

Legislative actions of the states are directly connected with the housing boards. This will constitute of the enactments on large number of subjects relevant to housing. However, the most important enactments are the Act setting up the housing board, the cooperative societies Act, the Apartment Ownership Act, Improvement Trusts Act, Municipal Acts, Premises Tenancy Acts, Rent Control, Stamp and Registration Acts. All these enactments influence the housing sector in some form or other. Since implementation of the public housing projects are mostly state government's responsibility, all these Acts are always associated with the implementation which means construction of houses. These enactments, therefore, become vital instruments of action so far as house construction is concerned, though the legislation might have been passed with different aims. In some cases the purpose may be to raise revenue, the other may be to ensure orderly growth of the cities and the other may be encouragement of house construction. In a few cases because of the difference in aims, there may even be certain incompatibilities between two or more Acts. For instance the building bye-laws may prescribe such specifications as would not be satisfied by the norms of low cost housing/sanitation in some cases. However, all these Acts do have a great deal of effect on the housing activity whether positive or negative. On the other hand the central legislation too do have an important bearing on housing activity. But they are more in the arena of housing finance and investments in housing and the related issues. The only operative act directly connected with implementation is the Land Acquisition Act of 1898, which for historical reason has remained a

central legislation and is administered by the agriculture ministry. Even there the implementation of the Act is the responsibility of the state government. The other two important Acts are the Income Tax Act and the Transfer of Property Act. Both these are very vital for investments in housing because the former provide the incentives (or disincenting) in housing and the latter decides the mortgagability of a property. Both these are important and even controls the activities of the State level housing agencies or even private investors. The Urban Land Ceiling (Development and Regulation) Act (ULCER) is another important legislative action. But it was done at the behest of the state governments and every State legislature had to pass a resolution to that effect. Hence for our analysis the ULCER does not fall into pattern. The pattern, in respect of legislative intervention that emerges is that of two separate action are as one of implementation and the other of finance and making a distinct identifiable delineation between the state sphere of activities and the centres. One is primarily for implementation, regulation and control and the other is for financing and related issues. It is as if through legislative actions themselves the states and the centre have decided on their areas of action.

INSTITUTIONAL ASPECTS

With the formation of the HUDCO, the Central Government took a major step forward in creating a strong institution at the Central level to mobilise finance for housing and for channelising the funds for low cost housing. HUDCO's involvement in the sector is no longer restricted to finance alone. Over the years it has built up a strong institutional capability to guide the State level institutions in strengthening their organisations, preparing projects and building up an effective information system. HUDCO's expertise has been built up with particular reference to low cost housing. The other important financing sources are the LIC and the GIC. But then their primary activities are related to some other sector and hence need not be considered in connection with the institutional issues. Over the last few years a new institution, the Housing Development Finance Corporation has come up. Though their main objective is to concentrate housing finance and ensuring easy access to such finance, they have within these few years, been able to evolve a system of evaluation and financing which in its turn has helped the borrowing agencies. The other important housing sector central level institution is the National Buildings Organisation. It is one of the best institutions in the field of research and development. Set up in 1954 its main function is to co-ordinate the research in the building construction which design technology building materials. Lot of attention has been paid by this organisation to development of techniques for low cost

housing and it has been able to assist the implementing organisations, mostly State level institutions in adoption of these techniques. However, NBO's main contribution in the housing sector has been during the era of direct involvement of the government in the housing sector in scheme implementation. With the growth of specialised institutions for housing finance and construction, there has been considerable overlap in functions. It has, therefore, remained mostly as a centre of evolving of technology and propagating the same through demonstration projects. Turning to the state level organisations we see again that from the 70s onwards there has been a growth of institutions in the Housing and Urban Development Sector. Prior to that the Improvement Trusts were the main house construction agencies operating on a commercial basis. The 'Social Housing Schemes' formulated between 1954 and 1959 by the Government of India were the first set of schemes which attempted to solve the housing problems of the weaker section. But its scale of operations was limited. Even the State implementation was mainly with the government departments. These schemes were transferred to the state sector in 1969. HUDCO was formed in 1970. The first urban development authority was also set up in the same year and gradually the States also set up Housing Boards, so that they could function as specialised agencies for housing construction.

The Urban Development Authorities, though mainly concerned with infrastructural development, also took up housing and area development mainly for generation of internal resources. The housing boards and the urban development authorities, therefore, concentrated on acquisition, development, construction and disposal of houses. Because of HUDCO's emphasis on low cost housing they had to build up capabilities for low cost housing and yet make the schemes financially viable. Some of the schemes were extended to the rural areas as well and many States have formed their own institutions for rural housing projects.

Thus with the introduction of specialised institutions dealing exclusively with housing finance the states gradually started building up strong institutional base. This was augmented further by the setting up of urban development authorities. Hence one major contribution of the central government in housing and urban development has been the creation of conditions which would induce the states to built up their institutional capabilities. It is significant to note that the central level institutions have mostly been the prime movers in the form of ensuring access to finance and formulation of new ideas and action programmes, in conformity with the policy guidelines. That such a transformation from one of direct participation to that of an observer and guide and assisting through finance alongwith the decision to transfer most of the outlays in the housing sector to the states is noteworthy. In that respect 1969 marks the formation of a new system of division of responsibilities in

the housing sector. The states with their strong institutional base are in a much better position to read out for alternative sources and make better use of the financial resources. The central government on the other hand has realised the need for promoting new ideas and improved techniques besides providing access to finance. Access to institutional finance for the state level institutions have been made comparatively easier by providing them with alternative source, including market borrowing. Thus with regard to the institutional set-up a two-way inter-relationship exists between centre and the states. The states are responsible for implementation and are required to initiate appropriate action including identification and procurement of land. They have limited access to state's financial resources but have to rely greatly on the central government for financial resources. The Central Government on the other hand faced with the enormous housing shortage cannot merely state that it is a state subject and has to initiate actions directly related to the problem. The present policy enunciated in the Plan that the public sector will focus on the absolutely shelterless is a pointer to this. Consequently it is considered necessary to evolve programmes in conformity with the Plan objectives. For this the central government has to rely on the states and has to be in touch with them and their programmes for ensuring fulfilment of Plan objectives. Unless the states agree to be the approach and the programmes, it is pointless to continue the efforts. Anybody familiar with planning process knows the high degree of importance attached to consultation with the states and the all out effort made to evolve a mutually agreed strategy in case of every state. This process is also applicable at the institutional level where close inter-linkages between the state level institutions and the central level institutions particularly HUDCO exist. The functions has been discussed are well understood. There is, therefore, very little possibility of overlap. The institutions connected with housing construction and housing finance can establish a complementary relationship built upon mutual reliance and dependence. This would be an ideal situation and easier to extend in the housing sector because there is no controversy about jurisdiction. However, by controlling the financial resources the central government are in a position to considerably mould the activities of the state level agencies. So long it is done to achieve the plan objectives and to improve the capabilities of these institutions, it is alright. However, the attempt to control the functions of the institution through control of financing must be awarded at all costs. Though till now this possibility has not emerged, in future too the concerned agencies have to be extremely alert to avoid such a possibility.

CONCLUSION

Housing is generally accepted as a state subject. They are mainly res-

ponding to the demands and formulate schemes to meet the demands. They have control over land and implementing agencies. They are competent to take legislative action in most of the aspects of the housing sector including promotional, regulatory and control aspect. On the other hand the central government provides bulk of the financial resources for housing and have built up institutional capabilities firstly to ensure easier access to finance and secondly to assist the State in building up institutional capabilities for utilising the financial resources and for formulation and execution of schemes which are in conformity with national priorities. An analysis of the resolutions of the central council of ministers of local government, urban development and housing will show that the states have also continuously sought closer association with these organisations and urged extension of their activities to reach out to more and more areas, without improving states capabilities of scheme formulation and execution. Being financial institution the central level institutions are required to work within certain norms and guidelines regarding lending terms and ceiling costs; as in the case of HUDCO. This has rarely been interpreted as attempts to interfere, but has helped in sharing up the institutional capabilities of the states. □

Financing Urban Development in Calcutta: A Case of Centre-State Fiscal Relations

KALYAN BISWAS

THE BASIC Development Plan (BDP) prepared by the Calcutta Metropolitan Planning Organisation (CMPO) for the Calcutta Metropolitan District¹ was published in 1966. It concluded, not with a ringing call for a new, greater, more beautiful Calcutta, but with a highly specific set of recommendations for immediate action in basic and minimum civic services like water supply, sewerage and drainage, traffic and transportation, slum improvement, health facilities, primary education, etc. The recommended programme size was Rs. 100 crores.

FINANCING OF THE BDP IMMEDIATE ACTION PLAN

The year 1966-67 was also the last year of the Third Plan. However, the Fourth Plan did not get off till the year 1969-70 and the intervening years were dealt with on Annual Plan basis. It is also worth recalling that during the period between 1967 and 1970, *i.e.*, the end of Third Plan and commencement of the Fourth Plan, West Bengal had a conspicuous period of political instability, recession in industry, a decline in real incomes, an absolute decline in employment, and deterioration in the law and order situation. In this short span of time the state went through two United Front Governments and two spells of President's Rule. Attempts were made by all these four governments to work out some kind of an independent financing arrangement for Calcutta's development. At one stage there was even a proposal to set up an Urban Development Corporation by Business and Industry jointly with the Government to raise funds. However, all that was achieved in this

¹Government of West Bengal, *The Basic Development Plan for the Calcutta Metropolitan District, 1966-86*, CMPO, Calcutta, 1966.

regard was to finalise the provision for the development projects in the metropolitan area at Rs. 42.88 crores; even this was identified only in the first year of the Fourth Plan which meant that action had not yet commenced on this programme by then.

The drop from the proposed Rs. 100 crores in the Fourth Plan (Immediate Action Plan in the BDP) to the outlay in the delayed Fourth Plan of Rs. 42.88 crores (a reduction by 57%) was a great disappointment. Yet it was not altogether unexpected; the scale and momentum of a full scale and determined development effort in Calcutta had been severely hampered by the economic and political circumstances as mentioned at the outset and also by some inherent prevailing organisational and environmental factors. A brief mention should be made of at least three of these:

- (a) Chronic shortage of funds for development at both the centre and state levels. "The present financial crisis in the state coupled with the paucity of central assistance to Calcutta is the single main impediment to plan implementation in Calcutta at the pace and scale recommended by CMPO. Ways and means must be found quickly of breaking the financial deadlock if a further disastrous deterioration in Calcutta's urban environment—and virtually in the metropolitan and regional economy—is to be avoided²";
- (b) Lack of political leadership and commitment to Calcutta's development. "Implementation, particularly in the complex urban situation of Metropolitan Calcutta, requires formidable political determination and leadership. This political commitment to Calcutta has yet to emerge both at the centre and the state and to an important extent, the present acute inadequacy of funds for development is, of course, a reflection of this. CMPO has already played an important role both in arousing political concern for Calcutta's future and in providing a systematic and realistic development programme that can be, and has been, adopted for implementation³"; and
- (c) Lack of administrative coordination. "Even given the shortage of funds and the inadequacies of political support, a great improvement in the present situation could be achieved through better inter-departmental cooperation at the administrative and executive levels. The preparation of a single capital budget for Metropolitan Calcutta is an urgent necessity"⁴.

²Quoted from an internal document of CMPO, "Development Planning in Calcutta", November, 1967.

³*Ibid.*

⁴*Ibid.*

The outlay of Rs. 43 crores effectively meant that, *ceteris paribus*, the average annual investment would be about Rs. 8.6 crores. Considering the fact that prior to 1970-71 the average annual expenditure on Calcutta's urban services was a dismal Rs. 3 crores per annum, the proposed Rs. 8.6 crores was not much of an improvement taking into account the huge deficits. It was evident that to make any kind of meaningful impact on the serious infrastructure situation, the investment will have to be much larger than Rs. 43 crores. It was a good augury, therefore, that the Planning Commission and the various ministries in the Government of India along with the state government officials initiated a series of discussions from March 1970 (by which time the second spell of President's Rule had been installed in the state) to find ways and means to increase the scope, the size and the tempo of the programme. The entire series of discussion between the state government and the Government of India was completed between March and May 1970 to embark on what was then described as an Accelerated Development Programme for the Calcutta Metropolitan District (CMD) in the Fourth Plan (1969-1974).

FINANCING OF THE ACCELERATED DEVELOPMENT PLAN FURTHER (CMD)

Much of these discussions and the final decision were undoubtedly helped by a combination of several favourable factors which seemed to remove the difficulties earlier mentioned, in mounting a substantial investment programme. Some, among others, were:

- (i) the availability of systems plans in respect of water supply, sewerage and drainage, traffic and transportation and Bustee improvement. In fact many preliminary project plans had already been prepared in these sectors based on these systems plans by the CMPO in the mid 60's;
- (ii) there was an obvious and determined political and administrative awareness and commitment of both the central and the state governments to tackle the critical problems in essential services in a forthright and workmanlike manner;
- (iii) it was possible to identify the priority sectors where development and recovery activity should be concentrated.

Most importantly, the organisational and the funding problems were given a special treatment. Various discussions with the central government led to an enlarged programme with the initial proposed outlay of Rs. 156.51 crores for the Fourth Plan period out of a total estimated cost of Rs. 234.24 crores of identified schemes based on the CMPO

plans and the exercises carried out by the development department of the state government. The spillover of Rs. 59.96 crores was proposed to be carried over to the Fifth Plan period. Nevertheless, there was a clear resource gap. There were four possible ways to meet the big gap between the original outlay of Rs. 43 crores and the finally approved figures of Rs. 156 crores. One was to enhance the State Plan provision which, however, was not possible. The second was enhancement of the central government loan outside the plan. This was done in various ways which we will see later. The third way out was to allow the local bodies, like, the Corporation of Calcutta, the Calcutta Improvement Trust and the bigger municipalities, to go for market borrowings with state government guarantee within the market borrowing ceiling of the state government as allowed by the Planning Commission. This was also accommodated in a manner to be described later. Fourthly, new sources of revenue were to be tapped and this was achieved by way of imposing the new octroi duty for the metropolitan area. On the basis of the calculations made on the possible realisation from these sources and as a result of further scrutiny of the individual schemes in the development programme, the overall outlay for the CMD schemes during the Fourth Plan period was finally settled at Rs. 149.69 crores which came to be known subsequently as the Rs. 150 crores programme for Calcutta. Out of this about Rs. 43 crores (Rs. 42.88 crores to be exact) was to be provided in the Plan and the rest from non-Plan sources, all of which were not clearly identified.

The summary sequential picture which emerged at this point of time was like this:

Total estimated cost of development schemes as identified on the basis of CMPO schemes	...Rs. 234.24 crores
Originally approved outlay for the Fourth Plan	...Rs. 42.88 „
First revised enlarged outlay for Fourth Plan	...Rs. 156.51 „
Finally revised enlarged outlay for the Fourth Plan	...Rs. 149.69 „

Basically, therefore, although the total financial support for a Rs. 150 crore programme was not fully available, the programme was given the green signal to go ahead. The first thing that strikes one is this act of faith on the part of many concerned, which approved and moved ahead a massive programme even without finalising all the financial lines of support—a rare phenomenon indeed in Centre-State relationship. Moreover, the central decision to support the Calcutta programme had several unusual elements for a programme like this, some of which

should be mentioned. For instance, these included decisions to:

- (i) construct Belgharia Express way as a central scheme, and to contribute half the expenditure on the Barrackpore-Kalyani Express way and the Kalyani Bridge from the Central Road Fund;
- (ii) give direct central loans to the Calcutta Corporation and Howrah Municipality to cover their revenue deficits;
- (iii) impose octroi (*i.e.*, entry tax) in the metropolitan area to cover revenue gaps including debt burden;
- (iv) authorise a market loan policy amounting to Rs. 12 to 14 crores per year for the programme, and
- (v) negotiate with foreign countries for financial assistance to the programme in the selective sectors.

A further point to note in this respect is that two other major projects vitally linked with metropolitan development, namely, the Second Hooghly Bridge and the Metro Railways, the former with an estimated outlay of Rs. 24 crores and the latter with Rs. 140 crores, were kept outside the funding pattern of the CMD programme, and were to be wholly financed as central schemes. Although this decision might appear to be the same as the one in (i) above, the basic difference is that while those in (i) were identified and included in the CMD programme from the very beginning, the other two were not exactly so when the decision to finance them in this manner was taken.

At about the same time in 1970, when these decisions were finalised, two special legislations, *viz.*, The Entry of Goods Tax (Calcutta Metropolitan Area) Act and the Calcutta Metropolitan Development Authority Act were passed as ordinances (there being no elected legislature then and the Presidential Rule was continuing) to tie up the financial and organisational loose ends for the implementation of the programme.

Prior to the 1970-71 Calcutta Programme, central government's financial assistance whether within or outside the Plan funds was limited to two specific programmes in the country, namely, the Large Scale Acquisition and Development scheme of the Delhi Development Authority from 1959 onwards and the support given to the state governments as block grants for the preparation of Master Plans in the various cities during the third plan period of 1961-66. The CMD development programme was completely different from these two schemes and it constitutes a separate trend altogether of far-reaching implications in the field of urban development through federal finance in this country. To appreciate this point further, it would be our endeavour to record why and how the central government financing of the Calcutta Programme from 1970-71 till 1978-79 was uniquely different throughout this period

when urban development constituted a central sector scheme till the end of Fifth Plan, *i.e.*, 1978-79.

FINANCING OF THE CALCUTTA URBAN DEVELOPMENT PLAN OF THE CMDA

The CMD programme as launched in 1970-71 was the first urban development programme of its kind in the country having a multisectoral investment schedule. The programme has had several other distinguishing features also, *viz.*, it had the first metropolitan level body (*i.e.*, CMDA) to plan and develop in a multiple municipal jurisdiction; it had to work through such a body in patently municipal functional areas, even though such a body itself had to remain outside the municipal structure; then again, it included both facilities (*i.e.*, water supply, drainage, etc.) and amenities (*i.e.*, health, education, solid waste management) in a range and at a level which was almost breath-taking (perhaps a legacy of CMPO's untiring planning effort itself); and finally, it was a programme where the Government of India and the state government (and later on the World Bank and other foreign governments) came together for the first time in the country to assume joint funding for an urban development project including pure and simple municipal services. Indeed these impressive firsts do not seem anymore unique now, but they were definitely so in 1970-71 when the programme started. From that time till 1974-75, when the central sector scheme on the Integrated Urban Development Programme (IUDP) was initiated, the central government financing of the CMD programme even under the IUDP carried its own separate identity which has remained a solitary instance.

CUDP AND THE IUDP

In fact it would be quite pertinent to say that but for the CMD programme perhaps the IUDP programme would not have been born in the manner and at the time it did. Some of the checklists which were applied rather were introduced, by the Government of India while approving the CMD programme, were later incorporated in the IUDP guidelines. Mention may be made of those which insisted upon an IUDP project to contain and indicate a specific and implementable programme, an identifiable and notified agency to supervise, coordinate and even to execute the programme, a reasonably workedout financial plan, and a demonstrated evidence of the state government furnishing support finance for the programme.

While the CMD programme was the precursor of the IUDP, the former did not wholly comply with the adopted guidelines of the latter. Perhaps that is the advantage which all pioneers have. Several such

departures can be mentioned. Firstly, while the IUDP guidelines followed the principle that the matching contribution of the state government or the Development Authority should be two-thirds for a metropolitan city in every annual investment programme for Calcutta it was always one-half. Secondly, the IUDP guidelines usually insisted upon some self-supporting resource-raising measures including land operations for a development authority; in Calcutta it was always talked about but never insisted upon as it was patently clear that a programme which was meant primarily to meet the huge deficits in basic municipal services, such resource-generation even by way of cost-recovery was out of question for some time to come. And finally, administrative, managerial, logistics and political support that were given to the programme were all outside the formal guidelines of IUDP and those were not extended at least in the same measure, to the other assisted cities.

CENTRAL REVIEW COMMITTEE

There was another central feature in the administration of the CMD programme. Having taken a very substantial responsibility for funding the programme, the Government of India had necessarily to follow up on its progress. Given the programme's multisectoral character, the mechanism of a Central Review Committee consisting of senior representatives of all the concerned ministries and agencies was formally set up by the Government of India. Its aim was to hold quarterly meetings, but it could usually hold two and sometimes three meetings a year. The advantages of the Review Committee were several. To recapitulate:

- (i) Being a high powered committee chaired by the Secretary, Ministry of Health at first and later by the Secretary, Ministry of Works and Housing, it functioned like an empowered committee to decide the size, the content and the funding of the annual programmes.
- (ii) Having senior representatives of the Planning Commission and Ministry of Finance, the recommended periodic releases of central funds by the Review Committee needed no further formal reference to them. The administrative ministry itself could release the amount directly.
- (iii) The mechanism evolved through (i) and (ii) above resulted in maintaining a flow of funds without much fuss which was commensurate with the progress and the requirement of the programme. This was a useful (but otherwise usually absent) and stable factor in maintaining the tempo of the programme.
- (iv) Through all these steps a certain degree of grip over programme administration as also a certain amount of accountability of non-

performance, delay or slippage were sought to be achieved. This certainly kept the implementing agencies and the development authority in check and under scrutiny.

- (v) The two or three meetings in a year produced a good level of data generation and report-making which enabled proper articulation, adequate comprehension, systematic analysis, selective interventions and judgements on comparative performance as nothing else would have possibly been done in the circumstances. As a result, the administrative ministry and more so the Development Authority acquired an institutional capability in programme monitoring, coordination and supervision which could not but have added strength to the programme.

In fact, the success of the review meeting of Calcutta led to the formation, by the Government of India, of such committees in Delhi, Bombay, and Madras when the last two came under IUDP. For other IUDP assisted units, however, a different pattern of review was resorted to. The important point arising here is that special and periodic reviews were actually resorted to, without waiting for, and depending solely on, the Annual Plan Working Group meetings. The other beauty of it was that such reviews usually (though not always) led to easier release of funds as programme supports, and it is particularly this point which was highly appreciated.

What did central and state joint funding and supervision achieve in the Calcutta programme? Sure enough, for the first time systematic and concentrated attack on the civic ills were started, although none would claim that any one of them has been solved. Yet it would be churlish to deny that some of them have not been mitigated or improved. This is not the place, however, for that kind of an appraisal. But other credits are there. In the first place, it stepped up the annual investment in the Calcutta-Howrah and adjoining areas of the metro-core from a measly Rs. 3 crores to about Rs. 30 crores by 1978-79. This in turn meant that a newly-created body like CMDA, which had assumed about 80 per cent of the direct implementation responsibility, had to be helped in quickly acquiring a planning, programming, funding and coordinating capacity which was extremely creditable. Thirdly, in doing so, CMDA established a metropolitan identity and supremacy which, more so in the peculiar circumstances in which it operated, brought far-reaching changes in the Indian urban thinking. A metropolis has always been a geographical or census concept in our thinking, and its sheer size and population have evoked either fear or antipathy, both based on ignorance, which the CMD programme did much to dispel and in its wake invited fresh examination of the metropolitan phenomenon itself. The need for an

identified capital budget as part of a metropolitan development fund was its inseparable adjunct.

BUSTEE IMPROVEMENT PROGRAMME

Moreover, two more positive aspects should be emphasised in this context. It was through the Calcutta programme in 1970-71 that both the centre and the state for the first time gave pragmatic recognition, through a massive action, to the Bustee Improvement Programme covering about 40 lakhs of Bustee dwellers in Calcutta and Howrah.⁵ Prior to this, slum clearance and rehousing had been the dominant emphasis in the central sector programmes; that such an approach was of limited value in our cities, that slum shelters were a net housing stock of sorts by themselves, and that sanitary environmental improvements of the Bustees (different as they are from the squatters' colonies) provided a far better opportunity cost for LIG and MIG housing investment within limited resources, came out more sharply through the Calcutta programme than even before. Consequently, in 1972, slum (bustee in Calcutta) improvement was included in the National Minimum Needs Programme for which project-tied non-transferable grants were made available to the State Governments by the Planning Commission. This still continues.

ECONOMIC DEVELOPMENT PROGRAMME

The other point to note was that the inescapability of economic development, in addition to pure physical development, of the metropolis in the framework of an economic development programme for the state came out even more sharply. The need for urban-regional economic development planning re-emerged. In August 1971, CMPO published a memorandum to this effect.⁶ The main thrust of the argument was that the economic base of the metropolis can be resuscitated through a significant increase in the productivity of the state's agriculture sector. This approach heralded the re-emergence of the regional planning and development effects earlier emphasised by CMPO. The Government of India also encouraged and CMDA set itself to prepare a revised perspective development plan for the metropolis in revision of the BDP.⁷ The multi-level planning exercise initiated throughout the country in 1972 created

⁵Government of West Bengal, Calcutta Metropolitan Planning Organization, *Bustee Improvement Programme for the Calcutta Metropolitan District*, Calcutta, 1967.

⁶Government of West Bengal, Calcutta Metropolitan Planning Organization, *A Memorandum on a Perspective Plan for Calcutta Metropolitan District and West Bengal, 1971-1989*, Calcutta, 1971.

⁷Government of West Bengal, Calcutta Metropolitan Development Authority, *Development Perspective Plan*, Calcutta, 1976.

State Planning Boards at the state levels, whereby inter-regional and inter-sectoral linkages and consistencies were sought to be established at lower levels in the state. State planning and metropolitan planning were thus seen as complementing and reinforcing each other. Lastly, we have already noted that the Centre-State involvement in the Calcutta programme for 1970-71 had sown the seeds of the IUDP programme began in 1974-75.

EXTERNAL ASSISTANCE

It is inconceivable that without state government's commitment and central government's involvement and encouragement, international agencies and foreign governments would have got interested in the Calcutta programme. Almost a similar situation had brought in the Ford Foundation in 1960 to Calcutta to mount a range and breadth of city planning activity the like of which has not been seen in any other city in India. So was the case with the World Bank, or more correctly its soft-loan affiliate (IDA); the Calcutta Urban Development Project credit of US \$35 million equivalent (1973-77) was the Bank Group's first urban project in India and elsewhere, and the first designed to support a broad programme of urban works financed and supervised by a single development agency; subsequently, a second credit of US \$87 million dollars for 1977-82 was granted, while the negotiations for the third credit for an estimated US \$100 million dollars are about to start early next year. Specific assistance in other areas have also been received from the UK and the Netherlands Governments.

ASPECTS OF FEDERAL FINANCE

With reference to federal finance, a special feature of the IDA-assisted projects deserves mention. As a matter of course, all IDA-assisted projects have to be fully accommodated within the ceiling of the State Plan. A part of the resources of the State Plan is contributed by the normal pattern of central assistance which comes by way of 70 per cent loan and 30 per cent grant. There is another element of supplemental central assistance for externally aided projects, like the IDA-assisted projects, which is available for the State Plan where such projects are included. This supplemental central assistance also comes by way of 70 per cent loan and 30 per cent grant. The two kinds of central assistance for externally aided projects—normal and supplemental—together constitute about 60 per cent of the total cost of the project. Therefore, for a hypothetical IDA-assisted project the total cost of which is, say, Rs. 100 crores, the total assistance to be received from the Central

Government is as follows:

- (i) Normal central assistance (70 per cent loan and 30 per cent grant)
Rs. 17.50 crores as loan
Rs. 7.50 crores as grant assistance
- (ii) Supplemental central assistance (70 per cent loan and 30 per cent grant)
Rs. 24.50 crores as loan
Rs. 10.50 crores as grant
- (iii) Total central assistance, therefore, is Rs. 60 crores out of which
Rs. 42 crores is loan and Rs. 18 crores is grant.

For this hypothetical Rs. 100 crore programme the balance amount of Rs. 40 crores will have to be financed by the state government from its own resources.

The IDA loans virtually carry no interest and are repayable over long periods like 25 years. This is advantageous both to the state and to the centre. As stated earlier, the entire financing is done by the centre in the form of block loans and block grants and not on the basis of individual projects. This is the reason why all such externally aided projects have to be fitted into the framework of a State Plan.

The IDA usually agrees to finance up to 50 per cent of the total cost of the project and this assistance comes in foreign exchange. This loan, however, is given directly to the central government and not to the state government. The question, therefore, arises whether IDA assistance in this respect is of any benefit to the state government. For one thing, the state government has to bear two kinds of loads for this Rs. 100 crore project: one load is that of repaying to the centre the loan of Rs. 42 crores, and the other load is raising resources for Rs. 40 crores which have to come from within the state. The next point is that but for the state government's preparing a project like this, the central government would not possibly have received this foreign exchange from IDA (unless there are other ready and acceptable projects). Thirdly, being very soft loans which is to be utilised for mainly non-remunerative schemes at least for the initial years, IDA-assisted projects in urban areas do not immediately and necessarily lead to increased financial burden for the State Government especially when supplemental central assistance can be availed of.

If, however, *ab initio* the state government's resources are such that it cannot raise even the 40 per cent of the project cost from its internal resources, then it would not possibly be wise to go in for such IDA projects. In fact that should be the basic criterion to decide at the outset whether the state government should at all pose any project for IDA-assistance.

Even outside the IDA, one can also say that the terms and conditions of IUDP during 1974-1979 were fairly reasonable for the states. As noted earlier, loans under IUDP were extended as plan assistance outside the State Plan subject to the condition that the amount of the loan would be passed on by the state government at the same rate of interest, as applicable to the central loan, to the implementing agency. The normal rate of interest was $5\frac{1}{2}$ per cent with a rebate of $\frac{1}{4}$ per cent for timely repayment. This was at a time when rate of interest for other centrally aided projects was $8\frac{1}{2}$ per cent. The period of loan was for 25 years with a moratorium for 5 years towards repayment which actually meant that the repayment could commence from the sixth anniversary of the date of the drawal, and this repayment could be made in twenty annual equal instalments.

This scheme of financial assistance in essence envisaged a second stage of fixing the terms and conditions for on-lending by the state government to the Development Authority. In the Calcutta case, these were not settled by the state government till 1981-82. Effectively, therefore, central and state loan assistance to CMDA remained as outstandings, distorting the capital base of CMDA to a great extent. The issue was resolved in the manner of a drastic surgery, when on the recommendation of the West Bengal Municipal Finance Commission set up by the state government, the state government wrote off its loans to CMDA in September 1982 with the stipulation that loan repayment and interest charge will devolve on the CMDA afresh from April 1983. In other words, the state government assumed upon itself the loan burden of the central government in this respect by keeping CMDA out of its reckoning.

BDP IN RETROSPECT

Many conventional criticisms have been made of the BDP of Calcutta, ever since that document was published. People who looked for the usual land use control maps, zoning regulations, green belt, etc., were disappointed not to have found them, especially when the Delhi Master Plan with many of these usual features (though there were a few innovations) had preceded the Calcutta Plan by only five years. The philosophy of, and the approach to Calcutta planning can best be described in the following words: "What Calcutta clearly needed, it seemed to us, was not a negative, restricted, regulative land use plan with the heavy commitment of scarce administrative resources that such a system of control requires, but rather a positive *development plan* in the full sense. With the emphasis on a development action directed at priorities of social and economic change, of selected capital investment in the physical infrastructure, of administrative and fiscal reorganisation, and of the

systematic generation and mobilisation of resources (fiscal, administrative, technical capacity, and the largely unutilised efforts and commitment of the population at large)".⁸

These were brave words indeed in the 60s, and were definitely uncommon and unapplied till then in Indian urban planning. No wonder, therefore, that the Calcutta programme which subsequently emerged in the seventies, was fundamentally different also from other known and practised varieties of urban development programmes till then in the country. The purpose of raising this issue in this paper on urban federalism is to record an unfortunate case of lost opportunity. If the central government's response to metropolitan development in this country had to begin in Calcutta which had such a planning approach behind it, it could possibly have been extended to other metropolises also which later came to be helped as part of a national programme. This, however, was not done; what was done instead was that the central sector scheme of IUDP was discontinued and passed on lock, stock and barrel to the state sector from 1978-79. As a result we missed the opportunity to evolve our own style, content and emphasis of metropolitan development and relapsed to the known, conventional, and tried measures under IUDP. May be an altogether new twist to the concept of Centre-State relationship in this area could have been given if this had not happened.

CONCLUSION

In conclusion, it may be useful to recapitulate the lessons learnt from the Calcutta programme as a manifestation of federal finance in the country.⁹ First, national cities require national investments. Second, the programme could not be initiated without national political commitment. Third, the planning effort must be a very broad one. Although selective, it must cover a wide array of needs. Third, a large amount of trained manpower is needed. And training must be built into the planning process as a continuing effort. Fourth, strong metropolitan organisations are needed. And fifth, the planning effort and the development tempo must be sustained. Vision, tenacity and conviction tempered by sensitivity are required if progress is to be made. Improvement of cities like Calcutta is a long hard job. □

⁸Colin Rosser, *Urbanization in Eastern India: The Planning Response*, Calcutta, Ford Foundation, 1969 (Mimeo).

⁹Arthur T. Row, "Metropolitan Problems and Prospects: A Study of Calcutta", in Leo Jacobson and Ved Prakash (eds.), *Metropolitan Growth: Public Policy for South and Southeast Asia*, New York, John Wiley and Sons, 1974.

Central-Local Relations: A Framework of Analysis

ASOK MUKHOPADHYAY

THE STUDY OF relations between the central government and the local authorities of any country has always been a field of absorbing interest. This is more so in Britain where the constitutional-political framework within which these relations are developed, is largely left to conventions and understandings and where the local authorities function in their own right as a separate political system. Up till recently this theme has received attention mainly from the point of view of public administration, but the study by Rod Rhodes of the University of Essex has shown that this theme deserves attention from the point of view of sociology, political science, management science, organisational analysis and above all, social philosophy in general. Rhodes's book owes its origin to a paper commissioned by the Committee of Inquiry into Local Government Finance (Layfield Committee).¹ The Social Science Research Council (SSRC) in Britain sponsored this study for locating control and power in central-local relations in Britain. This is a subject which appears conventional to an uncritical mind but is enormously intriguing and full of exciting interest to those who have any inkling into the complex interactions going on always between a country's central government and the sub-national units of governments at the regional and local levels. For a proper understanding of this type of relations a theoretical framework of analysis is needed for identifying issues and problems, raising new questions, and providing a distinctive re-interpretation of the central-local relations. Rhodes's analysis has led him to identify some areas where fruitful resources are called for in future. This aspect of his study makes this book relevant for other countries also, including the developing ones.

BIBLIOGRAPHICAL SURVEY

Apart from being a thorough bibliographical survey of the literature

¹R.A.W. Rhodes, *Control and Power in Central-Local Government Relations*, Farnborough, SSRC/Gower, 1981.

on the central-local relations in Britain, this study by Rhodes would be regarded as a major theoretical contribution because of the wide ground he has covered in his quest for a framework of analysis presented in the final chapter of his book. The uniqueness of this attempt lies in the skilful ways of relating the local authorities with the larger questions asked in political sociology of complex organisations. Having an industrially advanced society like Britain in view, he has examined the three broad theoretical generalisations made about the nature of such societies, namely, (a) thesis of 'over-loaded' or the 'ungovernable state' which is exhibiting a growing lack of accountability, (b) the thesis of post-industrial society where ownership and control of the process of production are divorced and a distinct conflict arises between the professionals (bureaucrats and technocrats) and the population, and (c) the thesis of growing corporate trends in the economic policies and industrial relations followed in advanced industrial societies.

After making a thorough review of the literature on central-local relations in Britain, he finds that none of the studies made so far in this field has felt the need of understanding the central-local relations in the overall context of a theoretical framework of analysis. It was the Layfield Committee which for the first time emphasised that the dominant feature of the relations between the central government and the local authorities in Britain was not financial dependence of the local authorities on the central government and found that 'ambiguity' and 'confusion' extended in relations between these two levels of government.² Starting from this fact of ambiguous and confusing nature of the central-local relations in Britain, Rhodes has tried to argue that central-local relations is but one facet of a larger system of relations between the central government and other types of subnational units of government, including the Quangos.³

BRITISH AND INDIAN EXPERIENCES

In India, ambiguities and confusion also exist in central-local relations and matters pertaining to this field are either referred to High Courts or the Supreme Court for adjudication or settled through the political processes of elections, parties, pressure groups and/or making of coalition-governments. Moreover, the relations existing between the state

²Committee of 'Enquiry into Local Government Finance, *Report* (Cmnd. 6453), London, HMSO, 1976.

³The acronym 'quango' (quasi-autonomous non-governmental organisation) has been used to describe non-departmental government agencies, some of which are regional or local rather than national in operation. Such bodies are not subject to even the minimal amount of control which Parliament can exercise over central government departments.

governments and the centrally-controlled public corporations or between the local authorities and the state-controlled public corporations are not at all free from ambiguity and confusion.

However, the British and Indian experiences in the field of state-local relations are remarkably contrasting to each other. In Britain 'control' is not the right expression to describe the interrelationships of local authorities with the central government. 'Collaboration' or 'partnership' has been found more appropriate terms to describe correctly the process of interactions which is not dominated by one side. The Layfield Report pointed out that 'partnership' between the central government and the local authorities meant confused sharing of responsibility. As a matter of fact, in the British political system both the partners like to live an environment of ambiguity and confusion as both derive benefit from such an environment where both have 'multi-lateral' contacts. Ambiguity leaves room for manoeuvre, giving freedom of action to negotiate and re-negotiate, and to circumvent controls which one is not willing to accept. In India's case, however, control exercised by the state governments over the municipal bodies is palpable. The local government legislations here abound in regulatory and punitive provisions. Apart from the traditional techniques of controls like inspection, calling for information and reports, giving directions and stipulating conditions with grant-in-aid, there are Draconian provisions about default powers, rescinding of resolutions, removal of members, and supersession and dissolution of local councils.

In Britain, whatever central control is there it is only potential in nature. In India, control is liberally exercised by the state governments over local government authorities in regard to the matters of local development, finance and even personnel administration. In Britain, all central departments, prefer to use minimum control, some are satisfied with giving advice, and still others only try to persuade local authorities to adopt some promotional policies. Similarly, it has also been found that even different sections or divisions of the same departments are inclined in different degrees to exercise restraint upon local authorities. Sometimes contradictory directions come to the local authorities from two or more central departments. These facts about central-local relations in Britain have been documented through concrete research in this field. But what is true for a small and homogeneous country like Britain would likely to be true for a country of India's size and diversity so far as these intergovernmental relations are concerned. The central-local relations become confusing also because of the multiplicity of channels through which communication constantly takes place between the central government ministers and officers, on the one hand, and the local government, on the other.

In India, again, the central Ministry of Works and Housing is concerned

with urban government institutions and the Ministry of Rural Reconstruction is concerned with rural local government institutions. Other central ministries, departments, and autonomous institutions deal with related subjects like cooperatives, transport, public health, environmental pollution, etc. Hence local government's relations with the host of governmental bodies in India are far more confusing than in Britain. Whether in Britain or in India, today one has to start studying central-local relations from this point of complexities and ambiguities. Hence there is the case for breaking out of the confines of the traditional legal-institutional orientation of public administration analysis of central-local relations. The task of analysing these relations deserves to be a concern of the social scientists in general. Rhodes has pursued his subject-matter in the light of the most important modern literature on interactions available in social sciences, namely, sociological research on *inter-organisational* analysis, and political science analysis of *inter-governmental relations*.

INTER-ORGANISATIONAL ANALYSIS

Inter-organisational analysis has contributed some useful concepts like organisational network, goals, power and exchange. The sociology of complex organisations emphasizes the link between organisation and its environment. Every organisation bargains for resources and decides upon the exchange of resources it can enter into with other organisations. Similarly, the network of linkages of local government is to be studied in order to discover the nature of central-local relations. Drawing upon the sociological analysis of complex organisation, effectiveness of a local authority can be evaluated in terms of: (a) whether it achieves its 'goals', (b) whether it is capable of finding an optimal allocation of 'resources', and (c) whether it is capable of acquiring 'resources'. But there are difficulties in this formula because 'goals' are the products of a political process which is intra-organisational as well as inter-organisational. Politico-economic environment influences organisational goal-attainment but does not itself determine the goals and/or decisions of an organisation. The point is universally valid on a theoretical plane. But the nature of the politico-economic environment in an economically advanced industrial society with a tradition of a pluralist democracy as in Britain would certainly be different from what he finds in an economically developing, tension-ridden democracy as in India.

The inter-organisational analysis uses three concepts of power: power as resources of the participants, power as rule-governed interaction, and power as mobilisation of bias. The analysis of organisational power must encompass all three in order to understand the link between organisations. Although capable of giving some insight into the central-local govern-

ment relations, this analysis cannot explore the complicated structure of power, values and interests involved in central-local interactions. Concepts of 'resource' and 'exchange' have to be refined while researching into the intricacies of inter-organisational relations. 'Resource' includes money, manpower as well as authority; 'exchange' includes bargaining and games. The concept of 'authority', again, assumes an additional dimension in a caste-ridden political system like India's. The point of legitimacy would also have to be very much taken into account in studying authority-structure in Indian society. Hence Rhodes's analysis of 'resource' and 'exchange' has to be much more sharpened in studying Indian situations. Not only does the nature of social relations and social organisations in India differ from that in Britain, but the wide extent of corruption as a major process of affecting politics, economics and administration in India demands that Rhodes's resource-exchange model would have to be modified for being of any use in analysing either central-state or state-local relations in India. Moreover, 'power' as mobilisation of bias would have a meaning in the Indian context completely different from that in Britain. Unlike the British political system, the Indian system is yet to achieve a consensus on political values and the pattern of economic development. On these points, Rhodes's framework appears to be of limited applicability in studying Indian situation.

INTER-GOVERNMENTAL RELATIONS

The political scientist's approach of inter-governmental relations might be helpful in understanding the nature of the elements of power and of the political process. 'Power', in this context, would include resources as well as ability to use suitable strategies. Inter-governmental relations explores the 'ground' of the game, *i.e.*, the power structure within which bargaining takes place for policy-making; in other words, this approach seeks to discover the values and the nature of power distributions supporting the interactions. But in the process of policy-making affecting the central-local government relations the relative importance of the professional groups and national institutions of local government has to be studied. The role of the professionals and technocrats, whom Galbraith has referred to as 'techno-structure', needs careful examination *vis-à-vis* the emergence of the 'topocrats'⁴ as the countervailing power to the technocrats. Both technocrats and topocrats need each other's support: the former seeking a broader support for their professional view-

⁴The term has been coined by S.H. Beer to mean anybody whose authority is derived from place, who claims to defend or promote the general public interests of a particular geographical area as opposed to the narrow professional or sectional interests of the technocrat.

point and the latter seeking legitimisation of their own interests and actions on scientific-professional standards. The 'techno-structure' of the industrially advanced liberal democracy has acquired tremendous bargaining power in recent years, and the challenge offered by it to the political system is serious indeed. But its Indian counterpart has not yet been able to assume much bargaining power and is seen favourably responding to the varying temper of the political leadership. Power as 'mobilisation of bias' would have obviously a different kind of meaning in the Indian context where 'charisma', caste prejudice, professional ego, political and economic corruption and things like these determine the nature and extent of authority in the total political system. The analysis of inter-governmental relations, no doubt, suggests new items of research in Britain but it does so in a different sense in developing societies like India. However, in both contexts inter-organisational analysis has to be supplemented by analysis of inter-governmental relations in all its complicated aspects.

A THEORETICAL FRAMEWORK

But even such analysis would fall short of providing a broader theoretical framework. Rhodes considers the link between 'figure' (interactions) and 'ground' (values and power distributions supporting interactions) as an essential component of any explanation of the interactions between the central government and other sub-national units of government and of their consequences for policy-making. The major macro-theories of 'post-industrial society' and 'corporatism' have been found unsatisfactory for this purpose, because they do not inform the analysis of the changes in inter-governmental relations. Hence Rhodes develops his framework of analysis in the final chapter of his book drawing upon both inter-organisational analysis and inter-governmental relations but avoiding their obvious weaknesses. After locating his 'modest' framework within the broader context of corporatism, he has given a systematic inventory or classification of elements to be explored in the study of central-local relations. The rationale of his framework lies in its ability to focus attention on key features of central-local relations, to suggest how interactions vary, and to provide an interpretation of the existing forms of such interactions. He has deliberately restricted the scope of his framework by not attempting to explain the policy-making process either at the central level or at the local level, because central-local relation is just one of the influences on the policy-making process. In fact, inter-governmental relation has a far broader scope than that of central-local relations. His suggested framework focuses on the critical aspect of power potential of the two levels of government, and is intended for analysing the central-local interactions. The effects of such interactions

have been sought to be built on five factors: (a) mutual resource dependency between organisations themselves, (b) resource exchange by organisations for the purpose of attaining their goals, (c) the values of the dominant actors (what he calls 'the appreciative system'), (d) formation of dominant coalitions based on strategies and known rules of the game, and (e) relative power potential of interacting organisations.

The 'power-dependence' framework, as Rhodes calls it, focuses on 'power' as resource. But this framework does not explain the origin of the rules of the game and the nature of the scheme of distribution of the resources, and treats values and interests as intra-organisational phenomena. In order to overcome the failure of the power-dependence framework to explain changes in the patterns of interaction, Rhodes proposes to link the micro-level analysis of interactions to a macro-level analysis of the changing role of government. In Britain's case, the theory of corporatism appears to suggest the acceptable form of such a linkage. But what is suitable for Britain is not suitable for analysing Indian experience. The concept of 'appreciative system' as used by Rhodes needs further elaboration. In societies like India, it becomes a difficult exercise to identify all the actors involved in the power game and bargaining processes going on between the centre and the states, and between the state government and local authorities. It also becomes difficult to disentangle the different roles of the actors because of the confused linkages existing between them. The framework of analysis suggested by Rhodes is commendable for its attempt to highlight a somewhat neglected aspect of studying inter-governmental relations, but it would be of limited use in understanding the Indian scene.

In India, not only the municipal corporations, municipalities and panchayats are dependent on state government for financial help and administrative powers but the state governments themselves are similarly dependent on the central government. When the central government supersedes any state government, there is a constitutional time-limit beyond which such supersession cannot continue; but there is no such time-limit within which superseded local authorities have to be brought back to normal democratic functioning. In fact, there are instances galore of municipal corporations, municipalities and panchayats functioning as superseded bodies for ten to twenty years at a stretch. In India, there is a sharp distinction between the municipal and the panchayat systems of local government: the former has similarities with the British counterpart, while the latter has resemblance with the continental tradition of local administration. Hence, the concept of 'discretion', which is a distinguishing feature of the British local authorities, has limited application for the urban local authorities, and perhaps, irrelevant for the rural local bodies in India. Therefore, there is hardly any scope of local bargaining with the central/state governments. This fact makes Rhode's

framework of analysis somewhat unrealistic for studying state-local relations in India, although his analytical framework could be somewhat profitably used in studying centre-state relations in India where a good deal of bargaining takes place and the state governments sometimes effectively use their 'discretion' in applying central laws. In the working of the Planning Commission and the Finance Commission one can also notice how the state governments argue their cases for bigger plan assistance and larger share of the divisible pool of the federal resources. Rhodes has not elaborated the concept of 'resources' in his power-dependence framework. It would mean different things in different constitutional-political settings. The power-dependence framework would not help in considering the various aspects of 'power' and 'resources' as these are found in developing societies. Hence the relevance of the framework suggested by Rhodes becomes limited in the case of developing heterogeneous and complicated political systems like India.

Rhodes has compared his pluralistic, power-dependence framework with the corporatist model in order to identify the ways in which the rules of the game and the resource exchange process might be changing. Hence he suggests that in future research attention should be focused on a number of processes and phenomena, viz.: (a) the network of organisations and pressure group activities within which both the central and local governments are to function; (b) the interaction processes going on within each policy community, between policy communities, and across policy communities; (c) the interdependence of a variety of organisations like public interest groups, specialised departments, etc.; (d) the nature and extent of bureaucratisation of the policy communities (whether they are 'closed' or 'open' forums); (e) the real nature of the 'appreciative system,' i.e., whether the policy lobbies represent interests of their members or act as intermediaries between the central department and their members, and thereby develop their own interest distinct from those of their members; (f) the nature of interests (sectional interest or general public interest) promoted or protected by policy communities; (g) the effectiveness of the powers of technocrats *vis-a-vis* those of topocrats; (h) the changes occurring in the rules of the game as a result of continuous inter-organisational and inter-governmental negotiations; and (i) the nature of 'power' (i.e., command over money as well as bargaining authority) and the system of values sustaining the participants in the game of central-local relations.

NEO-MARXIST EXPLANATIONS

Rhodes has avoided the neo-Marxist explanations in building his framework of analysis on the grounds that these explanations are not based on empirical inquiries and that the neo-Marxists are not unanimous

in their readings of the nature of the state. But would empirical data as such be enough to accept or reject a particular reading of the political economy? On Rhodes's own admission, barefooted empiricism has no value unless it is fitted into an overall theoretical understanding of the emerging political-economic trends in the society. By focusing on productive forces and analysing their relations with the state apparatus, the neo-Marxist explanations offer better theoretical framework than the theories of corporatism or post-industrial society for understanding the total environment in which power game is played in society. The disagreement among the neo-Marxists does not after all extend to the fundamentals. The values and structure of power distribution supporting the bargaining processes going on between different levels of government in a capitalist economy functioning within the contours of a formally pluralistic democracy like India can be understood only by raising and answering such questions as who initiates the development process, who ultimately gains from such development in the overall economy and especially in the rural and urban sectors, who manages the government machinery at different levels, and in whose interests governmental organisations actually work. Only when one finds answers to questions like these, the influence exercised by different actors in policy-making can be properly assessed. An Indian reader would not, therefore, find in Rhodes's model any ready made framework which he can profitably use for studying state-local relations in India. But the limitations of the British studies on central-local government relations pointed out by Rhodes would enable a student of this subject in any developing country to appreciate the shortcomings of studies conducted from the narrow viewpoint of law and public administration. One of the merits of Rhodes's study is his detailed review of literature pertaining to this field in Britain.

FUTURE RESEARCH AREAS

Rhodes was asked by the SSRC to identify the themes of coherent research in future in this area in Britain. The first thing that he has stressed is the need of theory-building about inter-governmental relations. Moreover, serious research seems to be needed for exploring the range of resources which can influence the extent of discretion used by the local authorities, and for explaining the varieties of relationships, for example, between central government and national associations of local authorities, joint bodies of local authorities, and the various professional bodies. It is of utmost interest to discover whether a national community of local government exists in Britain and what is its nature, and also to identify the interests on whose behalf the professional bodies work, and to examine the relationships existing between the local

authorities and a great number of public organisations. The alleged 'complexity' of relationships between the central government departments and the local authorities is to be unravelled. Next, the influence of political factors, like, the various channels of influence, mostly informal, between central and local governments are to be studied. And, finally, the real role played by the 'technostructure' in central-local relations is to be analysed.

Discretion in British local government is exercised as much by the people's representatives on the local council as by the professionals who constitute by now a strong force in British local administration. Hence 'discretion' could be seen both as a political as well as an administrative phenomenon. Detailed research will be necessary to find out the elements which constitute these two different types of 'discretion' found to be exercised by the local authorities in Britain. In India, however, 'discretion' exercised by local authorities has limited role to play, because in India's system of local government the elected representatives have all along been the weaker partner *vis-a-vis* the administrators and other professionals.

The pluralist power-dependence framework has been located in the perspective of the wider theory of corporatism which suggests that ever-growing state intervention leads to more and more state control on grounds of better management of the economy. In a corporatist economy self-regulating groups of policy-makers emerge as powerful entities; these closed groups derive their strength from the centralising management focus of the corporatist economy and are not politically accountable to any one. As Rhodes has seen it, corporatist trends in the British economy are on the increase and he argues that central-local relations should be understood in the larger context of this trend, and not through isolated empirical researches. He is correct in asserting that 'barefooted empiricism needs the guidance and insight of a framework of analysis'.

In studying the state-local relations in India emphasis has up till now been placed on legal-institutional factors, and whatever control has been used by the state governments, has been viewed as going against the principle of democratic decentralisation. But these studies by the Indian scholars have taken a public administration view which is somewhat narrower in scope than the view of political science in terms of 'power'. The point is to find out who uses powers (control as well as influence) over whom and with what consequences upon the total political system. The extent and techniques of state control exercised over local government institutions have to be examined in order to find out how much of it stems from party political rivalry and tensions and how much of it is manipulated by the growing 'technostructure' and the lobbies and clients working in collaboration with the techno-structure. The inter-organisational context of decision-making has to be explained and the nature of

mobilisation of bias fully analysed. Hence the need for locating the study of state-local relations in India in the overall context of the prevailing trends in the political economy.

CONCLUSION

The SSRC in Britain has already sponsored a few research projects along the lines suggested in Rhodes's framework of analysis. The ICSSR or some such bodies in India would find it rewarding to sponsor some in-depth researches into a number of aspects of centre-state and state-local relations in India, and the future researchers would find the pluralist power-dependence framework of analysis quite helpful not for what it actually offers but for the hints it gives about the pitfalls to be avoided and the directions to be taken in locating the studies of centre-state and state-local relations in India. So far as India is concerned the levels of industrialisation, democratisation and institutionalisation have been much affected by technological backwardness, administrative laxity, psychological complacency, political corruption, and lack of a cultural commitment to public welfare. This aspect of the environmental considerations has to be borne in mind in studying centre-state and state-local relations in India. □

Book Review

Report of the West Bengal Municipal Finance Commission (CHAIRMAN: * PROF. BHABATOSH DATTA), Government of West Bengal, Calcutta, March 1982.

The Survey undertaken in the preceding chapters displays a state of affairs that should not be allowed to continue. There is no overall principle or set of principles in regard to municipal finance in the state and it appears that levels of service, administrative performance, resource mobilisation and financial management do not show any clear pattern and cannot be related to any simple criterion as the size of the municipality either in terms of population or in terms of area. The dependence on property tax is evident in all cases but no serious attempt has been made at any level to improve the assessment and collection procedures. The sources of income other than property tax have not been exploited adequately. The result is increasing dependence on transfers from the State Government. These transfers take the form of shares of the entry tax and of the motor vehicles tax and also of various types of grants. These grants vary from year to year and there appears to be no rational explanation of the variations in the relative sizes of the various grants. Some municipalities have taken ways and means advances from the Government for meeting temporary resource shortages, but there are cases of large ways and means advances which have practically become grants. (p. 111)

This brief extract from the Commission's report aptly sums up their findings on the chaotic state of municipal finances in West Bengal. The report is an admirable compilation which is normally quite difficult to get on the state of municipal bodies in India. As the extract above exemplifies the report is also refreshingly candid presenting its findings. The picture painted of the state of municipal bodies in West Bengal is a very sad one particularly considering that municipalisation

*Members of the Commission are: (1) Prof. Abhijit Datta, (2) Smt. Nirmala Banerjee, (3) Shri R.M. Kapoor, (4) Shri M.G. Kutty (did not sign the report), and (5) Shri Kalyan Biswas.

came to Bengal relatively early in India. The Calcutta Corporation was founded in 1726 and there were as many as about 180 municipalities in what is now West Bengal by the end of the nineteenth century. Some of this long history of local government is somewhat illusory for universal franchise came to municipal elections only in 1962. It is notable that various attempts at higher public participation in Calcutta Corporation in the latter part of the last century came to naught because of 'public apathy'. But part of the reason for this apathy was the domination of the colonially appointed corporators in any of the many schemes that were suggested. The public participation suggested then was mostly illusory and merely a means of cosmetic legitimisation. The situation is not very different now—Calcutta Corporation has been superseded since 1972. The powers and responsibilities of local bodies (financial and otherwise) have been circumscribed enough to dissuade most of the better leaders to participate in local governance. The result is that their functioning has been going from bad to worse and the State Government has had to increase its involvement in the provision of local services. It is in this relatively dismal context that it is encouraging that the Commission still regards as its basic postulates that:

- (1) it is socially desirable to assign to the local authorities all services and other functions which are clearly identifiable as local and then to provide these authorities with adequate powers and assistance—financial, technical and administrative, for the proper performance of these functions, and
- (2) as long as the local bodies discharge their functions adequately and efficiently, they should be given the necessary measure of autonomy. This would mean substantial freedom to decide on the best manner in which development activities can be carried out, insofar as these activities relate only to the areas concerned.

The Commission feels that "if the principle of local self-government be accepted as politically sound, the local bodies should themselves be made alive to their own needs and given sufficient resources for the purpose of raising the levels of their services through planned investment".

It is clear from these principles that the Commission's approach was very much on the side of strengthening the local bodies. The recommendations, however, do not always reflect this approach and the Commission is aware of this itself. Most of the recommendations serve to strengthen the top-down approach. The main reason for this was that the current state of local bodies was found to be such that it was not found feasible to immediately give much greater autonomy and responsibility to the local bodies. This task has been left to future

municipal finance commissions. While recognising the constraints under which realistic recommendations could be given, I feel that the Commission lost a rare opportunity of taking some bold and new initiatives in the field of municipal finance and governance. This could have been done by separating immediate and short term recommendations from medium and long-term recommendations. In this way realistic and immediate palliatives could have been combined with more imaginative thinking for the future of urban areas in West Bengal.

As is well documented in the report, the basic services which local bodies provide are essentially mundane—water supply, drainage and conservancy, street lighting, roads and preventive health care. Indeed, about 60 per cent of the expenditure of most local bodies is consumed by the three essential services of water supply, drainage and conservancy and roads. Given that these constitute the essential function of municipal governments in West Bengal and most of India, it is relevant to ask why finances for such basic functions cannot be raised locally. Far from financing capital investments, many local bodies cannot even finance maintenance of existing services. It should be clear that these services are highly related to the volume of population residing in urban areas and hence the financing for their provision is a major long-term issue in the context of continuing urbanisation in the foreseeable future in India. The Commission has done admirable work in accomplishing its tasks according to the terms of reference supplied to it. It, therefore, gives what seems an eminently feasible plan for filling the expected deficits in the revenue of the local bodies. But the mode of projection of revenues and expenditures is essentially extrapolation from the present, even though the report documents very well that the level of services (in terms of per capita expenditure) prevailing in West Bengal is just about the worst in the country. This calls for major changes so that West Bengal can at least come up to the norms of the rest of the country. To be specific, it is found that average municipal revenue expenditure is only about Rs. 28 per capita in West Bengal which is about a quarter that of Maharashtra, half that of Haryana, a third of Gujarat and about a half of the all-India average. The proposals in the report will do little to alter this picture. It is difficult to understand why West Bengal cannot be at least as good as the all-India average.

The data compiled in the report are quite damning. The annual revenue of Calcutta Corporation is only about Rs. 26 crores as compared with Bombay' Rs. 110 crores, and Ahmedabad' Rs. 36 crores. The revenue for Howrah (about the size of Ahmedabad) is a paltry Rs. 2.61 crores. While total revenue expenditures are growing at 15-17 per cent per annum, the growth of internal revenue for Calcutta Corporation is only 9 per cent per annum while for other local bodies it is only 5 per cent per annum. In the absence of octroi in West Bengal,

property tax contributes 80-90 per cent of all internal revenues of local bodies. Although property tax is about Rs. 38 per capita for Calcutta, for others it is only Rs. 6 to 16 per capita. It is clear then that the key problem in internal revenue is the collection of the property tax. Yet the Commission fights shy of recommending any bold reforms in the property tax. This is a pity since, in recognition of its importance, the background work done by the Commission on property tax and by its consultants, the National Institute of Public Finance and Policy (NIPFP) is first rate and extremely illuminating. It is reported that there are problems in assessment as well as collection of the tax. According to the NIPFP Study, the Annual Rental Value (ARV) of Calcutta should be about double what is on the books. Further, collection has declined from 78 per cent in 1960-61 to 55 per cent in 1979-80. For West Bengal as a whole, collection is only 40 per cent of demand. As a result, property tax collections in Calcutta have actually declined in real terms over the past twenty years.

One of the key reasons identified for the slow rise in ARV is the operation of the rent control Acts. It is reported that as many as 60 per cent of tenanted buildings have tenants of over 10 years standing and about a third have tenants of over 20 years occupancy. In such circumstances it is not surprising that ARV would not rise much, given the operation of rent control laws. While admitting that rent control is not necessarily benefiting the less well off, the Commission pointedly does not recommend any changes in rent control laws. It even recognises that the provisions in the new Calcutta Act of 1981 aimed at circumventing the rent control laws for purposes of property tax assessment are likely to be struck down by the courts. Yet it does not recommend any changes in the rent control Acts. Presumably this shyness stems from the political difficulty of changing rent control provisions. But this should not have restrained the Commission from making such recommendations which flow logically from its own findings. It is true that amendments in rent control would have to take place in a phased manner and would take a long time to be effective—hence short term realism and expediency would dictate that a realistic and pragmatic body such as a Municipal Finance Commission should not recommend such changes. But then who will? Other arms of the Government do not even have a 5-year perspective that this Commission had. It, therefore, seems to me that the Commission has missed a rare opportunity to bring this much-needed change which would, on the one hand, raise tax revenues and on the other, free-up the housing market for higher investment in housing. One of the difficulties in assessment is found to be a stagnant housing market where very few transfers take place. Given the operation of rent control laws it is natural that renters would be loath to move—as shown by the information on the long tenure of existing tenants.

nts. Hence, the mobility of tenants is affected as well as property sales. Further, frequent reassessment has little meaning in the context of the existing rent control legislation. With all these issues in view it is, to say the least, extremely surprising that the Commission has not chosen to attack the problem of rent control legislation head on. A narrow reading of its terms of reference might argue that such a recommendation on rent control fell outside its purview but this would be difficult to sustain since it crucially affects the tax base of all the local bodies in West Bengal.

Having denied itself this major opportunity the Commission recommends a set of marginal changes to improve property tax assessment and collection. Assessment procedures are expected to be improved by the Central Valuation Board (CVB) which has already been formed. The Commission has suggested that the CVB would do well to concentrate on setting guidelines and procedures and to train assessors. The assessors themselves could be from the local bodies themselves. This is a good suggestion consistent with the idea that local bodies should be made more autonomous and responsible rather than less. The other main suggestion made is to assess commercial properties separately in addition to the consolidated rate. But, in summary, the property tax recommendations come as a damp squib considering the mountain of work done by the Commission on the property tax, collectively as well as individually by the members.

The key recommendation made on other taxes is the imposition of a "Madhya Pradesh-type" Entry Tax on all municipalities in West Bengal. At present there are two entry taxes already in operation in West Bengal: The 1955 tax on tea, jute and fruits entering the Calcutta area and the 1972 tax on other commodities entering Calcutta. Pending the introduction of the state-wide tax, some marginal adjustments are suggested in the distribution of the existing entry tax revenues to increase the share of the non-CMD (Calcutta Metropolitan District) local bodies. Although the Commission has stated very strongly that the subvention of state-collected revenues to the local bodies should be on a predictable, consistent and logical basis it has stopped short of recommending the basis for distribution of the entry tax and left this task for the next Municipal Finance Commission. The other main tax which is partially distributed to local bodies is the Motor Vehicles Tax. Here again the Commission falls short of its own precepts. It is critical of the fact that the proceeds from this tax are not distributed in any logical manner. The share of Calcutta was set at Rs. 4.5 lakhs/annum in 1923 and has not changed since. About Rs. 20-80 lakhs more are distributed to other local bodies from the proceeds—but there is no regularity to its distribution between local bodies nor from year to year. These amounts are from a tax which fetches about Rs. 16-20 crores per annum. The Commission is critical of

the fact that this tax is not distributed according to some logical basis like road mileage. What is suggested is a mere doubling of the existing distribution to local bodies! The Commission does, however, suggest the distribution of half the net proceeds from the entertainment tax to the local bodies according to population size.

These marginal changes in the devolution of state funds to local bodies reduce the expected deficit of local bodies. The remaining deficits are then to be filled by state grants as at present. The net message of the Commission on fiscal resources and distribution patterns is really something like: Things are terribly chaotic with municipal finances but there is not much that can be done about them at present so we recommend more of the same utilising band-aids here and there.

The Commission is a little more bold on the 'Development Finance' side. It observes critically that local bodies are not involved at all in planning at present: even the Calcutta Corporation has no planning cell. The planning function for Calcutta is vested in the Calcutta Metropolitan Development Authority (CMDA) which according to the Commission does not even consult the local bodies within its jurisdiction. One of Mr. Kutty's grounds for dissent with the Commission is that he claims that this consultation is indeed being done now by the CMDA. Even if this is true, the substance of the Commission's observation remains. It has, therefore, rightly recommended that "It should be made obligatory for every municipal body to frame a plan budget every year which should be a part of its own five year plan which, in its turn, should be an integral element of the State Five Year Plan." It goes on to suggest that the plan budget should partly be financed out of its own resources and partly by special plan assistance. It should also have in this recommendation that the physical Master Plans prepared by the State Town Planning Organisation should be taken into account in preparing this five year investment plan. An important reason for this recommendation is the current problem where local bodies are found not to have the resources for the maintenance of assets which have been created from State Plan assistance through Urban Development Authorities (UDAs). Calcutta Corporation, for example, does not have the running revenues to maintain the assets transferred to it by the CMDA. If investment planning is done by the local body or in consultation with it, such problems, presumably would not arise or at least would be foreseen such that provision is made for the recurrent revenues that would be necessary to maintain the assets created.

A considerably expanded role is recommended for the Directorate of Local Bodies. It is suggested that all transfers from the State Government to the local bodies should pass through this Directorate. Further, since it is recommended that the Municipal Finance Commission be appointed regularly every 5 years on the lines of the Federal Finance

Commission, it is also suggested that a permanent municipal finance cell be maintained in the Directorate. It is hoped that over time such provisions would regularise State-local fiscal relations such that they are less susceptible to the whims and fancies of particular officials and politicians at any given time.

All in all the Commission has done an admirable job of addressing the terms of reference assigned to it. It has given a detailed listing of all the local bodies in West Bengal, projected their revenues and expenditures upto 1985-86 and shown how the suggested recommendations will fill-in the necessary gaps. It has, however, failed to look at the larger issue of continuing urbanisation and the financing of urban services which will be increasingly demanded as a result. This is clearly a long term problem for which long term solutions have to be found. It was thus arguably beyond the Commission's terms of reference. But long term solutions can only be found and implemented if short term policies are consistent and are framed within a long term framework.

The crucial issue is "who pays for these services"? The Commission has suggested, somewhat demurely, that water metering should be done as far as possible. This hesitation is presumably based on a far greater sense of realism than my own, but I would have thought that a stronger statement was needed on the virtues of user charges for all services which have identifiable consumers. The problems of collection of taxes as well as user charges in a poor country where the large majority of people would only pay small sums are, however, immense. The collection costs themselves assume large proportions as is found in the smaller municipalities. If it is accepted that key urban services like water supply, drainage and conservancy and roads have to be provided by a public authority and if it is equally accepted that, as a whole, the people consuming these services should pay for them (for otherwise the rural people would be subsidising the better-off urban folk), the need for innovative urban management and financing becomes immediately apparent. It is here that the Commission has given no thought whatsoever. It has constrained itself to the consideration of traditional ways of administration, management and resource raising. As the Commission has itself stated so eloquently: "The local authorities are closer to the people than the government at higher levels. Their functions include those for which close contact with the people is necessary. They can involve residents at all levels in the working of local government and in the performance of local functions." Having observed this, none of the Commission's recommendations are devoted to bring the local government nearer the people. A crying need in urban areas is the decentralisation of local government. In some places this has been done under the rubric of 'community development'. If communities are organised at levels smaller than the city as a whole the task of collection of taxes or that of user charges can also be decen-

tralised for some functions. Functions, such as, conservancy, can then be a sub-local function for example. Further, where it is difficult to collect small amounts of user charges (and taxes), communities as a whole can be made responsible. It has been found in some other countries that even paving of internal roads can be charged for successfully where the local authority provides incentives for communities themselves to come forward and offer to pay for the extension of a service to the community as a whole. Community development and decentralisation of urban government and financing, therefore, would seem to be dictated by pragmatism as well as the ideals of democratic participation. The crucial issue, of course, is that such suggestions cut across different fields—management, planning and financing. Hence a Municipal Finance Commission does not feel competent to suggest far reaching changes. For the rest, there is no organised body giving thought to these issues of import. The sad result is that our towns and cities, big and small, will continue to creak along as they always have and their citizens will continue to wallow in the filth of sewage and ills of congestion.

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